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INSTRUMENT APPROACH PROCEDURE CHARTS

A IFR ALTERNATE AIRPORT MINIMUMS

Standard alternate minimums for non precision approaches are 800-2 (NDB, VOR, LOC, TACAN, LDA, VORTAC, VOR/DME, ASR or WAAS LNAV); for precision approaches 600-2 (ILS or PAR). Airports within this geographical area that require alternate minimums other than standard or alternate minimums with restrictions are listed below. NA - means alternate minimums are not authorized due to unmonitored facility or absence of weather reporting service. Civil pilots see FAR 91. IFR Alternate Airport Minimums: Ceiling and Visibility Minimums not applicable to USA/USN/USAF. Pilots must review the IFR Alternate Airport Minimums Notes for alternate airfield suitability.

NAME	ALTERNATE MINIMUMS
AKRON, OH	
AKRON-CANTON RGNL	**ILS or LOC Rwy 19[1]** **ILS or LOC Rwy 23[2]** **RADAR[3]**

[1]NA when local weather not received.
[2]LOC, NA.
[3]NA when Akron-Canton approach control closed.

NAME	ALTERNATE MINIMUMS
ANDERSON, IN	
ANDERSON MUNI-DARLINGTON FIELD	**ILS or LOC Rwy 30[1]** **NDB Rwy 30** **RNAV (GPS) Rwy 30** **VOR-A**

NA when local weather not available.
[1]NA when control tower closed.

NAME	ALTERNATE MINIMUMS
ASHTABULA, OH	
ASHTABULA COUNTY	**RNAV (GPS) Rwy 8** **RNAV (GPS Rwy 26**

NA when local weather not available.

NAME	ALTERNATE MINIMUMS
ATHENS, OH	
OHIO U SNYDER FIELD	**NDB Rwy 25**

NA when local weather not available.

NAME	ALTERNATE MINIMUMS
BLOOMINGTON, IN	
MONROE COUNTY	**ILS or LOC/DME Rwy 35** **RNAV (GPS) Rwy 17** **RNAV (GPS) Rwy 35** **VOR/DME Rwy 6** **VOR/DME Rwy 24**

NA when local weather not available.

NAME	ALTERNATE MINIMUMS
CINCINNATI, OH	
CINCINNATI MUNI-LUNKEN FIELD	**ILS or LOC Rwy 21L** **LOC BC Rwy 3R** **NDB Rwy 21L** **NDB Rwy 25** **RNAV (GPS) Rwy 21L** **RNAV (GPS) Rwy 25**

[1]NA when control tower closed.
[2]Categories A,B, 1200-2; Categories C,D, 1200-3.
[3]Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾.
[4]NA when local weather not available.
[5]Category B, 900-2, Category C, 900-2¼; Category D, 900-2¾.

NAME	ALTERNATE MINIMUMS
CLEVELAND, OH	
BURKE-LAKEFRONT	**ILS Rwy 24** **NDB or GPS Rwy 24**

NA when control tower closed.
[1]Categories A,B, 900-2; Category C, 900-2½; Category D, 900-2¾.

NAME	ALTERNATE MINIMUMS
CUYAHOGA COUNTY	**ILS or LOC Rwy 24** **LOC/DME BC Rwy** **RNAV (GPS) Rwy** **RNAV (GPS) Rwy**

NA when local weather not available.
[1]NA when control tower closed.
[2]ILS, Category D, 700-2.

NAME	ALTERNATE MINIMUMS
COLUMBUS, IN	
COLUMBUS MUNI	**ILS Rwy 2** **RNAV (GPS) Rwy** **RNAV (GPS) Rwy 1** **RNAV (GPS) Rwy 2** **RNAV (GPS) Rwy 3**

[1]NA when control tower closed.
[2]NA when local weather not available.

NAME ALTERNATE MINIMUMS

COLUMBUS, OH

BOLTON FIELD ..... **ILS or LOC Rwy 4[1,2]**
NDB Rwy 4[1,2]
RNAV (GPS) Rwy 4[2]
[1]NA when control tower closed.
[2]NA when local weather not available.

OHIO STATE UNIVERSITY ..... **ILS or LOC Rwy 9R**
NDB Rwy 9R
NA when control tower closed.

PORT COLUMBUS INTL **ILS or LOC Rwy 10L[1]**
ILS or LOC Rwy 10R[2,3]
ILS or LOC Rwy 28L[4]
[1]ILS, Categories A,B,C, 700-2; Category D, 700-2¼. LOC, Category D, 800-2¼.
[2]ILS, 700-2. LOC, NA.
[3]NA when local weather not available.
[4]ILS, Categories A,B,C,D, 700-2.

RICKENBAKER INTL ..... **ILS or LOC Rwy 5L**
ILS or LOC Rwy 5R
ILS or LOC Rwy 23L
NDB Rwy 5R
NDB Rwy 23L
RNAV (GPS) Rwy 5R
RNAV (GPS) Rwy 23L
NA when local weather not available.

DAYTON, OH

DAYTON-WRIGHT BROTHERS ..... **RNAV (GPS) Rwy 2**
RNAV (GPS) Rwy 20
NA when local weather not available.
Category D, 800-2¼.

DELAWARE, OH

DELAWARE MUNI ..... **RNAV (GPS) Rwy 10**
RNAV (GPS) Rwy 28
NA when local weather not available.

ELKHART, IN

ELKHART MUNI ..... **ILS or LOC Rwy 27[1]**
RNAV (GPS) Rwy 9[2]
RNAV (GPS) Rwy 18[2]
RNAV (GPS) Rwy 27[2]
RNAV (GPS) Rwy 36[2]
VOR/DME Rwy 36[2]
VOR Rwy 9[2]
VOR Rwy 27[2]
[1]LOC, NA when control tower closed.
[2]NA when local weather not available.

NAME ALTERNATE MINIMUMS

EVANSVILLE, IN

EVANSVILLE RGNL ..... **ILS or LOC Rwy 4[1]**
ILS or LOC Rwy 22
NDB Rwy 22
NA when control tower closed.
[1]ILS, Categories A, B, 800-2; Category C, 800-2¼; Category D, 800-2½. LOC, Category C, 800-2¼; Category D, 800-2½.

FINDLAY, OH

FINDLAY ..... **RNAV (GPS) Rwy 18**
RNAV (GPS) Rwy 25
RNAV (GPS) Rwy 36
VOR Rwy 7
NA when local weather not available.

FORT WAYNE, IN

FORT WAYNE INTL ..... **ILS or LOC Rwy 5[1]**
ILS or LOC Rwy 32[1]
LOC BC Rwy 14[1]
RADAR-1[1]
RNAV (GPS) Rwy 5[1,3]
RNAV (GPS) Rwy 23[1,3]
VOR or TACAN Rwy 5[1]
VOR or TACAN Rwy 14[1]
VOR or TACAN Rwy 23[4]
[1]Category E, 800-2½.
[2]Category E, 800-2¼.
[3]NA when local weather not available.
[4]Category D, 800-2¼, Category E, 2½.

SMITH FIELD ..... **VOR Rwy 13**
NA when local weather not available.

GARY, IN

GARY/CHICAGO INTL .... **NDB or GPS Rwy 30**
NA when control tower closed.

GOSHEN, IN

GOSHEN MUNI ..... **RNAV (GPS) Rwy 27**
VOR Rwy 27
NA when local weather not available.

GRIFFITH, IN

GRIFFITH-MERRILLVILLE ..... **VOR Rwy 8**
NA except for operators with approved weather reporting service.

HAMILTON, OH

BUTLER COUNTY RGNL **ILS or LOC Rwy 29[1]**
RNAV (GPS) Rwy 11[2]
RNAV (GPS) Rwy 29[2]
NA when local weather not available.
[1]ILS,LOC,Categories A, B, 900-2; Category C, 900-2½; Category D, 900-2¾.
[2]Category D, 800-2¼.

NAME ALTERNATE MINIMUMS

HUNTINGBURG, IN

HUNTINGBURG ..... **RNAV (GPS) Rwy 9**
RNAV (GPS) Rwy 27

NA when local weather not available.

INDIANAPOLIS, IN

EAGLE CREEK
AIRPARK ..... **RNAV (GPS) Rwy 21**
VOR-A

NA when local weather not available.

INDIANAPOLIS INTL ..... **ILS or LOC Rwy 5L**
ILS or LOC Rwy 5R
ILS or LOC Rwy 14
ILS or LOC Rwy 23L
ILS or LOC Rwy 23R
ILS or LOC Rwy 32

ILS, Categories A,B,C,D, 700-2.

JEFFERSONVILLE, IN

CLARK RGNL ..... **VOR or GPS Rwy 18**

NA except for operators with approved weather reporing service.

KNOX, IN

STARKE COUNTY ..... **RNAV (GPS) Rwy 18**
VOR Rwy 18[1]

NA when local weather not available.
[1]Category D, 800-2¼.

KOKOMO, IN

KOKOMO MUNI ..... **VOR or GPS Rwy 23**
VOR or GPS Rwy 32
VOR/DME RNAV or GPS Rwy 5

NA except standard for operators with approved weather reporting service.

LAFAYETTE, IN

PURDUE UNIVERSITY ..... **ILS Rwy 10[12]**
RNAV (GPS) Rwy 10[34]
RNAV (GPS) Rwy 28[34]
VOR-A[15]

[1]NA when control tower closed.
[2]ILS, Category D, 800-2¼. LOC, NA.
[3]Category D, 800-2¼.
[4]NA when local weather not available.
[5]Category D, 800-2¼.

LANCASTER, OH

FAIRFIELD COUNTY ..... **RNAV (GPS) Rwy 10**
RNAV (GPS) Rwy 28

NA when local weather not available.

LIMA, OH

LIMA ALLEN COUNTY ..... **RNAV (GPS) Rwy 27**
VOR Rwy 27

NA when local weather not available.

NAME ALTERNATE MINIMUMS

LOGANSPORT, IN

CASS COUNTY ..... **VOR/DME RNAV Rwy 27**
VOR-A

NA except standard for operators with approved weather reporting service.

LORAIN/ELYRIA, OH

LORAIN
COUNTY RGNL ..... **RNAV (GPS) Rwy 7**
VOR-A

NA when local weather not available.

MANSFIELD, OH

MANSFIELD
LAHM RGNL ..... **ILS or LOC Rwy 32[1]**
NDB Rwy 32[1]
RADAR-1[1]
RNAV (GPS) Rwy 14[2]
RNAV (GPS) Rwy 32[2]
VOR Rwy 14[2]
VOR Rwy 32[2]

[1]NA when control tower closed.
[2]NA when local weather not available.

MARION, OH

MARION MUNI ..... **RNAV (GPS) Rwy 7**
RNAV (GPS) Rwy 13
RNAV (GPS) Rwy 25
VOR-A

NA when local weather not available.

MOUNT VERNON, OH

KNOX COUNTY ..... **RNAV (GPS) Rwy 10**
RNAV (GPS) Rwy 28

NA when local weather not available.

MUNCIE, IN

DELAWARE COUNTY-JOHNSON
FIELD ..... **ILS Rwy 32[1]**
RNAV (GPS) Rwy 14[2]
RNAV (GPS) Rwy 32[2]
VOR Rwy 14[2]
VOR or GPS Rwy 20[3]
VOR Rwy 32[2]

[1]NA when control tower closed.
[2]NA when local weather not available.
[3]NA when control tower closed, except for operators with approved weather reporting service.

NEWARK, OH

NEWARK-HEATH ..... **LOC Rwy 9[1]**
VOR-A[2]

[1]Category D, 800-2¼.
[2]Categories A, B, 1000-2; Categories C, D, 1000-3.

NAME ALTERNATE MINIMUMS

SHELBYVILLE, IN

SHELBYVILLE MUNI ..... **RNAV (GPS) Rwy 1**
RNAV (GPS) Rwy 19
NA when local weather not available.
Category D, 800-2¼.

SOUTH BEND, IN

SOUTH BEND RGNL ..... **ILS or LOC Rwy 9R[1]**
ILS or LOC Rwy 27L[1]
RNAV (GPS) Rwy 36[2]
VOR Rwy 18[1]
[1]NA when control tower closed.
[2]NA when local weather not available.

SPRINGFIELD, OH

SPRINGFIELD-BECKLEY
MUNI ..... **ILS or LOC Rwy 24[12]**
RNAV (GPS) Rwy 6[3]
RNAV (GPS) Rwy 24[3]
VOR Rwy 6[3]
[1]NA when control tower closed.
[2]ILS, LOC, Category E, 900-3.
[3]NA when local weather not available.

TERRE HAUTE, IN

TERRE HAUTE INTL-
HULMAN FIELD ..... **LOC BC Rwy 23[1]**
RADAR-1[12]
RNAV (GPS) Rwy 5[3]
RNAV (GPS) Rwy 14[3]
RNAV (GPS) Rwy 23[3]
RNAV (GPS) Rwy 32[3]
[1]Category E, 800-2¼.
[2]NA when control tower closed.
[3]NA when local weather not available.

TOLEDO, OH

METCALF FIELD ..... **VOR Rwy 4**
Category C, 800-2¼; Category D, 800-2½.

TOLEDO EXPRESS ..... **ILS or LOC Rwy 7[1]**
ILS or LOC Rwy 25[23]
RADAR-1[4]
RNAV (GPS) Rwy 7[24]
RNAV (GPS) Rwy 25[4]
[1]ILS, Category E, 800-2½.
[2]NA when local weather not available.
[3]ILS,LOC,Category E, 800-2½.
[4]Category E, 800-2½.

VALPARAISO, IN

PORTER COUNTY MUNI ..... **ILS Rwy 27[1]**
RNAV (GPS) Rwy 9[2]
RNAV (GPS) Rwy 18[2]
RNAV (GPS) Rwy 27[2]
[1]LOC, NA.
[2]NA when local weather not available.

NAME ALTERNATE MINIMUMS

VAN WERT, OH

VAN WERT COUNTY ..... **NDB Rwy 9**
RNAV (GPS) Rwy 9
RNAV (GPS) Rwy 27
NA when local weather not available.

WARSAW, IN

WARSAW MUNI ..... **VOR or GPS Rwy 9**
VOR or GPS Rwy 27
NA except standard for operators with approved weather reporting service.

WILMINGTON, OH

AIRBORNE AIRPARK ..... **ILS Rwy 4L[13]**
ILS or LOC Rwy 4R[12]
ILS Rwy 22L[12]
RNAV (GPS) Rwy 22R[4]
VOR or GPS Rwy 4L[3]
VOR/DME Rwy 22R[45]
VOR Rwy 22R[3]
[1]ILS, Category D, 700-2.
[2]NA when control tower closed except for operators with approved weather reporting service.
[3]NA except standard for operators with approved weather reporting service.
[4]NA when local weather not available.
[5]NA when control tower closed.

WOOSTER, OH

WAYNE COUNTY ..... **RNAV (GPS) Rwy 10**
RNAV (GPS) Rwy 28
VOR Rwy 10[1]
NA when local weather not available.
[1]Category D, 800-2¼.

YOUNGSTOWN-WARREN, OH

YOUNGSTOWN-WARREN
RGNL **RADAR-1**
NA when Youngstown approach control closed.

ZANESVILLE, OH

ZANESVILLE MUNI ..... **VOR or GPS Rwy 4[1]**
VOR or GPS Rwy 22[2]
[1]Category D, 800-2¼.
[2]Categories A,B, 900-2; Categories C,D, 900-3.

AKRON, OH

Amdt. 23, July 5, 2007 (FAA) ELEV **1228**

AKRON-CANTON RGNL

RADAR - 125.5 371.875 (EAST) 118.6 323.0 (WEST) ▼ A

	RWY GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
ASR	1	ABC	**1580**/24	371	(400-½)	D	**1580**/50	371	(400-1)
	5	ABC	**1580**-1	378	(400-1)	D	**1580**-1¼	378	(400-1¼)
	19	ABC	**1580**/24	362	(400-½)	D	**1580**/50	362	(400-1)
	23	ABC	**1620**/24	392	(400-½)	D	**1620**/50	392	(400-1)
CIRCLING		A	**1660**-1	432	(500-1)	B	**1680**-1	452	(500-1)
		C	**1680**-1½	452	(500-1½)	D	**1780**-2	552	(600-2)

Procedure NA when Akron-Canton approach control closed. For inoperative MALSR, increase S-1 CAT D visibility to RVR 6000, S-19 CAT D visibility to RVR to 6000, and S-23 CAT D visibility to RVR 6000.

DAYTON, OH

Amdt. 9, OCT 22, 2009 (FAA) ELEV **1010**

JAMES M. COX DAYTON INTL

RADAR - 118.425 126.5 134.45 294.5 352.05 ▼

	RWY GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
ASR	6L	ABC	**1380**/24	382	(400-½)	D	**1380**/50	382	(400-1)
	36	AB	**1420**-1	411	(500-1)	CD	**1420**-1¼	411	(500-1¼)
CIRCLING		AB	**1480**-1	471	(500-1)	C	**1480**-1½	471	(500-1½)
		D	**1560**-2	551	(600-2)				

For inoperative ALSF-2 increase S-6L Category D visibility to RVR 6000.

EVANSVILLE, IN

Amdt. 6, MAY 7, 2009 (FAA) ELEV **418**

EVANSVILLE RGNL

RADAR-1 - 126.4 226.4 ▼

	RWY GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
ASR	22	AB	**880**/24	462	(500-½)	C	**880**/40	462	(500-¾)
		D	**880**/50	462	(500-1)				
	4	AB	**880**-1	495	(500-1)	C	**880**-1¼	495	(500-1¼)
		D	**880**-1½	495	(500-1½)				
	36	AB	**880**-1	497	(500-1)	C	**880**-1¼	497	(500-1¼)
		D	**880**-1½	497	(500-1½)				
	18	AB	**880**-1	484	(500-1)	C	**880**-1¼	484	(500-1¼)
		D	**880**-1½	484	(500-1½)				
CIRCLING		A	**940**-1	522	(600-1)	B	**960**-1	542	(600-1)
		C	**960**-1½	542	(600-1½)	D	**980**-2	562	(600-2)

When control tower closed, procedure NA. Visibility reduction by helicopters NA.

FORT WAYNE, IN

Amdt. 25, JUL 2, 2009 (FAA) ELEV **814**

FORT WAYNE INTL

RADAR - 127.2 284.6

	RWY GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
ASR	5	AB	**1300**/24	486	(500-½)	C	**1300**/40	486	(500-¾)
		D	**1300**/50	486	(500-1)	E	**1300**/60	486	(500-1¼)
	14	AB	**1300**-1	498	(500-1)	C	**1300**-1¼	498	(500-1¼)
		D	**1300**-1½	498	(500-1½)	E	**1300**-1¾	498	(500-1¾)
	23	AB	**1300**-1	501	(600-1)	CD	**1300**-1½	501	(600-1½)
		E	**1300**-1¾	501	(600-1¾)				
	32	AB	**1260**/24	460	(500-½)	C	**1260**/40	460	(500-¾)
		DE	**1260**/50	460	(500-1)				
CIRCLING		AB	**1300**-1	486	(500-1)	C	**1300**-1½	486	(500-1½)
		D	**1380**-2	566	(600-2)	E	**1520**-2½	706	(800-2½)

Rwy 5, for inoperative ALSF-2, increase S-5 Cat E visibility ½ mile.
Rwy 32, for inoperative MALSR, increase S-32 Cat E visibility ½ mile.
LOST COMMUNICATIONS (ALL RWYS): As directed by ATC on initial contact.

GRISSOM ARB (KGUS), IN (Peru) (06159 USAF)

ELEV **812**

RADAR - Ctc APP CON - **(E)** 121.05 318.2 379.3

	RWY	GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
ASR[1]	5[2]		AB	**1180**/24	368	(400-½)
			CDE	**1180**/40	368	(400-¾)
	23[3]		AB	**1260**/24	460	(500-½)
			C	**1260**/40	460	(500-¾)
			DE	**1260**/50	460	(500-1)
CIR	All Rwy		AB	**1340**-1	528	(600-1)
			C	**1340**-1½	528	(600-1½)
			D	**1380**-2	568	(600-2)
			E	**1440**-2	628	(700-2)

[1]No-NOTAM preventive maint sked: ASR 1200-1400Z++ Mon. ASR apch svc avbl 1200-0400Z ++dly, (contingent upon manpower and eqpt availability). [2]When ALS inop, increase CAT ABC RVR to 50 and vis to 1 mile, CAT DE RVR to 60 and vis to 1¼ miles. [3]When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C RVR to 60 and vis to 1¼ miles, CAT DE vis to 1½ miles.

MANSFIELD, OH

Amdt. 4A, MAY 7, 2009 (FAA) ELEV **1297**

MANSFIELD LAHM RGNL

RADAR - 124.2 390.8 A

	RWY GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
ASR	23	AB	**1700**-1	405	(500-1)	CD	**1700**-1¼	405	(500-1¼)
	5	AB	**1740**-1	443	(500-1)	C	**1740**-1¼	443	(500-1¼)
		D	**1740**-1½	443	(500-1½)				
CIRCLING		AB	**1760**-1	463	(500-1)	C	**1760**-1½	463	(500-1½)
		D	**1880**-2	583	(600-2)				

When control tower closed, ASR NA.

TERRE HAUTE, IN

Amdt. 4, MAR 22, 2001 (FAA) ELEV **589**

TERRE HAUTE INTL-HULMAN FIELD

RADAR - 125.45 339.8 A

	RWY GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
ASR	5	ABC	**920**/24	347	(400-½)	DE	**920**/50	347	(400-1)
	32	ABCD	**920**-1	331	(400-1)	E	**920**-1¼	331	(400-1¼)
	23	ABC	**940**-1	357	(400-1)	DE	**940**-1¼	357	(400-1¼)
CIRCLING		A	**1020**-1	431	(500-1)	B	**1040**-1	451	(500-1)
		C	**1040**-1½	451	(500-1½)	D	**1140**-2	551	(600-2)
		E	**1240**-2¼	651	(700-2¼)				

For inoperative MALSR, increase S-5 Category D and E visibility to RVR 6000.
Circling not authorized NW of Rwys 5/23 for Category E aircraft.
When control tower closed, procedure NA.

TOLEDO, OH

Amdt. 19, AUG 18, 1994 (FAA) ELEV **684**

TOLEDO EXPRESS

RADAR - 134.35 317.55 V A

	RWY GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
ASR	25	ABC	**1040**-½	362	(400-½)	DE	**1040**-1	362	(400-1)
	34	ABC	**1040**-1	372	(400-1)	DE	**1040**-1¼	372	(400-1¼)
	16	ABC	**1060**-1	386	(400-1)	DE	**1060**-1¼	386	(400-1¼)
	7	ABC	**1080**/24	397	(400-½)	DE	**1080**/50	397	(400-1)
CIRCLING		AB	**1180**-1	496	(500-1)	C	**1180**-1½	496	(500-1½)
		D	**1240**-2	556	(600-2)	E	**1360**-2½	676	(700-2½)

Category D S-7 visibility increased to RVR 6000 for inoperative ALSF-2.
Category D S-25 visibility increased to 1¼ miles for inoperative MALSR.

YOUNGSTOWN-WARREN, OH Amdt. 13, OCT 8, 1998 (FAA) ELEV **1196**

YOUNGSTOWN-WARREN RGNL

RADAR - 133.95 322.3

	RWY	GS/TCH/RPI	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS	CAT	DA/ MDA-VIS	HAT/ HATh/ HAA	CEIL-VIS
ASR	5		ABC	**1520**-1	356	(400-1)	D	**1520**-1¼	356	(400-1¼)
	14		ABC	**1520**-½	386	(400-½)	D	**1520**-1	386	(400-1)
	23		ABC	**1580**-1	388	(400-1)	D	**1580**-1¼	388	(400-1¼)
	32		ABC	**1580**/24	395	(400-½)	D	**1580**/50	395	(400-1)
CIRCLING			A	**1640**-1	444	(500-1)	B	**1660**-1	464	(500-1)
			C	**1660**-1½	464	(500-1½)	D	**1760**-2	564	(600-2)

Category D S-14 visibility increased ¼ mile for inoperative MALSR.
Category D S-32 visibility increased ¼ mile for inoperative MALSR.

INSTRUMENT APPROACH PROCEDURE CHARTS

IFR TAKE-OFF MINIMUMS AND (OBSTACLE) DEPARTURE PROCEDURES

Civil Airports and Selected Military Airports

ALL USERS: Airports that have Departure Procedures (DPs) designed specifically to assist pilots in avoiding obstacles during the climb to the minimum enroute altitude , and/or airports that have civil IFR take-off minimums other than standard, are listed below. Take-off Minimums and Departure Procedures apply to all runways unless otherwise specified. Altitudes, unless otherwise indicated, are minimum altitudes in MSL.

DPs specifically designed for obstacle avoidance are referred to as Obstacle Departure Procedures (ODPs) and are described below in text, or published separately as a graphic procedure. If the (Obstacle) DP is published as a graphic procedure, its name will be listed below, and it can be found in either this volume (civil), or a separate Departure Procedure volume (military), as appropriate. Users will recognize graphic obstacle DPs by the term "(OBSTACLE)" included in the procedure title; e.g., TETON TWO (OBSTACLE). If not assigned a SID or radar vector by ATC, an ODP may be flown without ATC clearance to ensure obstacle clearance.

Graphic DPs designed by ATC to standardize traffic flows, ensure aircraft separation and enhance capacity are referred to as "Standard Instrument Departures (SIDs)". SIDs also provide obstacle clearance and are published under the appropriate airport section. ATC clearance must be received prior to flying a SID.

CIVIL USERS NOTE: Title 14 Code of Federal Regulations Part 91 prescribes standard take-off rules and establishes take-off minimums for certain operators as follows: (1) Aircraft having two engines or less - one statute mile. (2) Aircraft having more than two engines - one-half statute mile. These standard minima apply in the absence of any different minima listed below.

MILITARY USERS NOTE: Civil (nonstandard) take-off minima are published below. For military take-off minima, refer to appropriate service directives.

NAME TAKE-OFF MINIMUMS

AKRON, OH

AKRON-CANTON RGNL (CAK)
AMDT 5 86352 (FAA)
DEPARTURE PROCEDURE: All aircraft climb straight ahead to 1700 before proceeding on course.

AKRON FULTON INTL (AKR)
TAKE-OFF MINIMUMS: **Rwys 1, 7, 19, 25,** 300-1.
DEPARTURE PROCEDURE: **Rwy 1,** climb runway heading to 2100 before turning West. **Rwy 25,** climb runway heading to 2100 before turning north.

ANDERSON, IN

ANDERSON MUNI-DARLINGTON FIELD (AID)
TAKE-OFF MINIMUMS: **Rwys 18, 36,** 300-1.

ASHLAND, OH

ASHLAND COUNTY (3G4)
TAKE-OFF MINIMUMS: **Rwys 1, 19,** 300-1.

NAME TAKE-OFF MINIMUMS

ASHTABULA, OH

ASHTABULA COUNTY (HZY)
ORIG 09183 (FAA)
NOTE: **Rwy 8,** trees beginning 779' from DER, 34' left of centerline, up to 91' AGL/1020' MSL. Trees beginning 27' from DER, 17' right of centerline, up to 91' AGL/1007' MSL. **Rwy 26,** trees beginning 1219' from DER, 183' left of centerline, up to 99' AGL/1008' MSL. Trees beginning 1465' from DER, 406' right of centerline, up to 83' AGL/992' MSL.

AUBURN, IN

DE KALB COUNTY(GWB)
AMDT 1 06271 (FAA)
NOTE: **Rwy 9,** multiple trees beginning 428' from departure end of runway, 227' right of centerline, up to 100' AG/979' MSL. **Rwy 27,** multiple trees beginning 83' from departure end of runway, 207' left of centerline, up to 100' AGL/939' MSL. Multiple tree beginning 1377' from departure end of runway, 316' right of centerline, up to 100' AGL/930' MSL.

BARNESVILLE, OH

BARNESVILLE-BRADFIELD (6G5)
ORIG 85297 (FAA)
TAKE-OFF MINIMUMS: **Rwys 9, 27,** 300-1.

BEACH CITY, OH

BEACH CITY (2D7)
ORIG 82245 (FAA)
TAKE-OFF MINIMUMS: **Rwys 10, 28,** 300-1.

BELLEFONTAINE, OH
BELLEFONTAINE RGNL (EDJ)
ORIG 03079 (FAA)
DEPARTURE PROCEDURE: **Rwy 7,** climb to 2100 via heading 074° before proceeding on course.

BLOOMINGTON, IN
MONROE COUNTY (BMG)
AMDT 5 02052 (FAA)
NOTE: **Rwy 6,** trees 2185' from departure end of runway, 755' left of centerline, 81' AGL/967' MSL. **Rwy 24,** trees 2325' from departure end of runway, 830' right of centerline, 87' AGL/1019' MSL. **Rwy 17,** trees 854' from departure end of runway, 595' left of centerline, 67' AGL/862' MSL. **Rwy 35,** trees 2376' from departure end of runway, 905' left of centerline, 85' AGL/932' MSL.

BLUFFTON, OH
BLUFFTON (5G7)
AMDT 1 09183 (FAA)
NOTE: **Rwy 5,** trees beginning 975' from DER, 572' left of centerline, up to 100' AGL/949' MSL.

BOWLING GREEN, OH
WOOD COUNTY (1G0)
AMDT 3 07074 (FAA)
TAKE-OFF MINIMUMS: **Rwy 18,** 300-1.
NOTE: **Rwy 18,** building/tower 3581' from departure end of runway, 254' right of centerline, 141' AGL/841' MSL.

BRAZIL, IN
BRAZIL CLAY COUNTY (0I2)
TAKE-OFF MINIMUMS: **Rwys 9, 27,** 300-1.

BUCYRUS, OH
PORT BUCYRUS-CRAWFORD COUNTY (17G)
AMDT 1 83048 (FAA)
TAKE-OFF MINIMUMS: **Rwys 4, 9, 22, 27,** 300-1.

CADIZ, OH
HARRISON COUNTY (8G6)
AMDT 2 99252 (FAA)
TAKE-OFF MINIMUMS: **Rwy 13,31,** 300-1.

CALDWELL, OH
NOBLE COUNTY (I10)
AMDT 1 97146 (FAA)
TAKE-OFF MINIMUMS: **Rwy 5, 23,** 400-1.
DEPARTURE PROCEDURE: **Rwy 23,** climb runway heading to 1500 before turning.

CAMBRIDGE, OH
CAMBRIDGE MUNI (CDI)
AMDT 2 96144 (FAA)
TAKE-OFF MINIMUMS: **Rwys 4, 22,** 500-1 or std. with a min. climb of 350' per NM to 1500.

CARROLLTON, OH
CARROLL COUNTY-TOLSON (TSO)
AMDT 4 99140 (FAA)
TAKE-OFF MINIMUMS: **Rwy 7, 25,** 300-1.
NOTE: **Rwy 7,** 100' AGL trees 1800' from departure end of runway, 400' left of centerline. **Rwy 25,** 100' AGL trees 200' from departure end of runway, 400' left of centerline.

CELINA, OH
LAKEFIELD (CQA)
AMDT 1 83342 (FAA)
TAKE-OFF MINIMUMS: **Rwy 8,** 300-1.

CHILLICOTHE, OH
ROSS COUNTY (RZT)
AMDT 3 96116 (FAA)
TAKE-OFF MINIMUMS: **Rwy 23,** 400-1 or std. with min. climb of 340' per NM to 1300. **Rwy 30,** 300-1 or std. with a min. climb of 460' per NM to 1100.
DEPARTURE PROCEDURE: **Rwy 5,** climb runway heading to 1500 before turning right. **Rwy 12,** climb runway heading to 2000 before turning right. **Rwy 23,** climb runway heading to 1500 before turning left.

CINCINNATI, OH
CINCINNATI MUNI AIRPORT-LUNKEN FIELD (LUK)
AMDT 13 08269 (FAA)
TAKE-OFF MINIMUMS: **Rwy 3L,** std. w/ min. climb of 392' per NM to 1000 or 400-2 w/ min. climb of 213' per NM to 1400 or 1700-2 ½ for climb in visual conditions. **Rwy 3R,** std. w/ min. climb of 355' per NM to 1000 or 400-2 w/ min. climb of 231' per NM to 1400 or 1700-2 ½ for climb in visual conditions. **Rwy 7,** std. w/ min. climb of 424' per NM to 1000 or 400-1¾ with min. climb of 205 ft per NM to 1300 or 1700-2½ for climb in visual conditions. **Rwy 21R,** std. w/ min. climb of 467' per NM to 1100 or 600-3 w/ min. climb of 223' per NM to 1300 or 1700-2 ½ for climb in visual conditions. **Rwy 21L,** std. w/ min. climb of 403' per NM to 1100 or 600-2¾ with minimum climb of 228' per NM to 1400 or 1700-2½ for climb in visual conditions. **Rwy 25,** 600-2¾ w/ min. climb of 219' per NM to 1300 or 1700-2½ for climb in visual conditions.
DEPARTURE PROCEDURE: **Rwy 3L,** climb heading 027° to 1200 before proceeding on course. For climb in visual conditions: cross Cincinnati Muni airport-Lunken Field at or above 2000 MSL before proceeding on course. **Rwy 3R,** climb heading 025° to 1400 before proceeding on course. For climb in visual conditions: cross Cincinnati Muni airport-Lunken Field at or above 2000 MSL before proceeding on course. **Rwy 7,** climb heading 066° to 1200 before proceeding on course. For climb in visual conditions: cross Cincinnati Muni airport-Lunken Field at or above 2000 MSL before proceeding on course. **Rwy 21R,** climb heading 207° to 1500 before proceeding on course. For climb in visual conditions: cross Cincinnati Muni airport-Lunken Field at or above 2000 MSL before proceeding on course. **Rwy 21L,** climb heading 205° to 1400 before proceeding on course. For climb in visual conditions: cross Cincinnati Muni airport-Lunken Field at or above 2000 MSL before proceeding on course. **Rwy 25,** climb heading 246° to 1900 before proceeding on course. For climb in visual conditions: cross Cincinnati Muni airport-Lunken Field at or above 2000 MSL before proceeding on course.

CINCINNATI MUNI AIRPORT-LUNKEN FIELD (CON'T)

NOTE: **Rwy 3L,** building and hangers beginning 306' from departure end of runway, 258' left of centerline, up to 41' AGL/521' MSL. Multiple trees beginning 958' from departure end of runway, 144' right of centerline, up to 67' AGL/556' MSL. Trees 1.3 NM from departure end of runway, 2271' left of centerline, 97' AGL/866' MSL. Pole 1.6 NM from departure end of runway, 334' left of centerline, 68' AGL/797' MSL. **Rwy 3R,** multiple trees beginning 1426' from departure end of runway, 196' left of centerline, up to 68' AGL/557' MSL. Multiple trees beginning 840' from departure end of runway, 130' right of centerline, up to 83' AGL/572' MSL. Trees 1.4 NM from departure end of runway, 2393' left of centerline, 97' AGL/856' MSL. Pole 1.6 NM from departure end of runway, 2062' left of centerline, 68' AGL/797' MSL. **Rwy 7,** multiple trees beginning 447' from departure end of runway, 68' left of centerline, up to 87' AGL/576' MSL. Multiple trees beginning 664' from departure end of runway, 45' left of centerline, up to 86' AGL/575' MSL. Trees 4515' from departure end of runway, 1519' right of centerline, 81' AGL/720' MSL. Trees 1.4 NM from departure end of runway, 2088' right of centerline, 95' AGL/824' MSL. **Rwy 21R,** multiple trees beginning 1444' from departure end of runway, 204' left of centerline, up to 66' AGL/555' MSL. Multiple trees beginning 1072' from departure end of runway, 25' right of centerline, up to 79' AGL/568' MSL. Trees 1.1 NM from departure end of runway, 2261' right of centerline, 86' AGL/895' MSL. Tower 2.3 NM from departure end of runway, 527' left of centerline, 168' AGL/990' MSL. Tower 2.4 NM from departure end of runway, 694' right of centerline, 106' AGL/943' MSL. **Rwy 21L,** multiple trees beginning 122' from departure end of runway, 104' left of centerline, up to 85' AGL/574' MSL. Multiple trees beginning 422' from departure end of runway, 313' right of centerline, up to 82' AGL/571' MSL. Trees 4521' from departure end of runway, 1659' left of centerline, 117' AGL/716' MSL. Tower 2.0 NM from departure end of runway, 2027' right of centerline, 168' AGL/990' MSL. Pole 2.2 NM from departure end of runway, 281' right of centerline, 78' AGL/841' MSL. **Rwy 25,** sign, pole, multiple hangars and trees beginning 177' from departure end of runway, 13' left of centerline, up to 86' AGL/575' MSL. Road, building, multiple poles and trees beginning 185' from departure end of runway, 5' right of centerline, up to 73' AGL/562' MSL. Trees 4537 from departure end of runway, 837' right of centerline, 82' AGL/831' MSL. Tank 1.4 NM from departure end of runway, 1755' right of centerline, 210' AGL/1046' MSL. Antenna on building 2.3 NM from departure end of runway, 2552' left of centerline, 116' AGL/915' MSL.

CLEVELAND, OH

BURKE-LAKEFRONT (BKL)
AMDT 4A 09155 (FAA)

TAKE-OFF MINIMUMS: **Rwy 6L,** 400-2 or std. w/ a min. climb of 400' per NM to 1800. **Rwy 6R,** 400-2 or std. w/ a min. climb of 360' per NM to 1800. **Rwy 24L,** 300-1½ or std. w/ a min. climb of 527' per NM to 1900. **Rwy 24R,** 200-1 or std. w/ a min. climb of 527' per NM to 1900.

DEPARTURE PROCEDURE: **Rwys 6L/6R,** climb via heading 065° to 1800 before proceeding on course. **Rwys 24L/24R,** climbing right turn via CXR VOR/DME R-272 to 1900 before proceeding on course.

NOTE: **Rwy 6L,** obstruction light on hangar 1127' from DER, 780' right of centerline, 47' AGL/622' MSL. Tower 5589' from DER, 1760' right of centerline, 237' AGL/857' MSL. Stacks 1.6 NM from DER, 883' right of centerline, 312' AGL/898' MSL. **Rwy 6R,** obstruction light on WSK 166' from DER, 241' left of centerline, 21' AGL/590' MSL. Stacks 1.8 NM from DER, 381' right of centerline, 312' AGL/898' MSL. Tower 5676' from DER, 1999' right of centerline, 108' AGL/734' MSL. Tower 1.1 NM from DER, 1258' right of centerline, 237' AGL/857' MSL. **Rwy 24L,** monument 1257' from DER, 10' left of centerline, 55' AGL/630' MSL. Bridge 1.1 NM from DER, 2006' left of centerline, 208' AGL/792' MSL. Antenna 227' from DER, 505' left of centerline, 37' AGL/608' MSL. Antenna on building 1529' from DER, 2340' left of centerline, 483' AGL/1126' MSL. Building 2805' from DER, 3340' left of centerline, 949' AGL/1603' MSL. **Rwy 24R,** crane 2228' from DER, 296' left of centerline, 136' AGL/707' MSL. Antenna 2783' from DER, 1155' left of centerline, 186' AGL/764' MSL. Multiple buildings 2787' from DER, 3873' left of centerline, up to 949' AGL/1603' MSL. Antenna on building 1529' from DER, 2839' left of centerline, 483' AGL/1126' MSL.

CLEVELAND-HOPKINS INTL (CLE)
AMDT 15 08325 (FAA)

DEPARTURE PROCEDURE: **Rwys 6L,6R, 10,** climbing left turn to intercept DJB VOR/DME R-082 to 2600 before proceeding on course.

NOTE: **Rwy 10,** multiple signs beginning 1237' from departure end of runway, 717' left of centerline, up to 68' AGL/857' MSL, light pole 1746' from departure end of runway, 786' right of centerline, 53' AGL/842' MSL, tower 4157' from departure end of runway, 1456' right of centerline, 137' AGL/922' MSL. **Rwy 24L,** multiple trees and poles beginning 1903' from departure end of runway, 5' left of centerline, up to 89' AGL/849' MSL. **Rwy 24R,** tower 2565' from departure end of runway, 1028' right of centerline, 191' AGL/870' MSL, multiple trees 3653' from departure end of runway, 857' left of centerline, up to 103' AGL/870' MSL. **Rwy 28,** vehicle on road 304' from departure end of runway, 3' left of centerline, 14' AGL/773' MSL. Antenna on building 308' from departure end of runway, 240' left of centerline, 13' AGL/775' MSL. Multiple trees beginning at 1046' from departure end of runway, 105' left of centerline, up to 60' AGL/819' MSL. Tower 2640' from departure end of runway, 946' right of centerline, 80' AGL/840' MSL.

CLEVELAND, OH (CON'T)

CUYAHOGA COUNTY (CGF)
ORIG 06159 (FAA)

NOTE: **Rwy 6,** trees beginning 2127' from departure end of runway, 975' right of centerline, up to 109' AGL/982' MSL. Tree 2595' from departure end of runway, 740' left of centerline, 93' AGL/947' MSL. **Rwy 24,** multiple trees beginning 755' from departure end of runway, 658' right of centerline, up to 100' AGL/948' MSL. Multiple trees beginning 1833' from departure end of runway, 681' left of centerline, up to 100' AGL/974' MSL.

COLUMBUS, IN

COLUMBUS MUNI (BAK)
ORIG 08269 (FAA)

NOTE: **Rwy 14,** tree 1589' from departure end of runway, 306' right of centerline, 40' AGL/696' MSL.

COLUMBUS, OH

BOLTON FIELD (TZR)
ORIG 09015 (FAA)

DEPARTURE PROCEDURE: **Rwy 4,** climb heading 037° to 1800 before turning east.

NOTE: **Rwy 4,** tree 1091' from departure end of runway, 770' left of centerline, 53' AGL/959' MSL. Tree 487' from departure end of runway, 356' right of centerline, 23' AGL/929' MSL. Tree 1317' from departure end of runway, 452' right of centerline, 42' AGL/948' MSL. Tree 1307' from departure end of runway, 50' left of centerline, 36' AGL/942' MSL. Tree 1927' from departure end of runway, 135' right of centerline, 49' AGL/955' MSL. **Rwy 22,** tree 1273' from departure end of runway, 720' right of centerline, 40' AGL/945' MSL. Tree 712' from departure end of runway, 662' right of centerline, 25' AGL/927' MSL. Tree 1411' from departure end of runway, 658' right of centerline 33' AGL/939' MSL.

PORT COLUMBUS INTL (CMH)
AMDT 6 07130 (FAA)

DEPARTURE PROCEDURE: **Rwys 28L, 28R,** climb heading 279° to 2700 before turning left.

NOTE: **Rwy 10L,** tree 1950' from departure end of runway, 908' left of centerline, 53' AGL/862' MSL. Tree 1883' from departure end of runway, 914' right of centerline, 57' AGL/866' MSL. **Rwy 10R,** trees 1870' from departure end of runway, 927' right of centerline, 86' AGL/877' MSL. **Rwy 28L,** multiple trees beginning 1398' from departure end of runway, 785' left of centerline, up to 51' AGL/870' MSL. Multiple trees beginning 2109' from departure end of runway, 1020' right of centerline, up to 75' AGL/884' MSL. **Rwy 28R,** multiple poles and trees beginning 1743' from departure end of runway, 625' right of centerline, up to 59' AGL/878' MSL.

CONNERSVILLE, IN

METTEL FIELD (CEV)
AMDT 2 06271 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4, 22,** NA-VFR use only.

DEPARTURE PROCEDURE: **Rwy 18,** climb via heading 185° to 1500 before proceeding on course.

NOTE: **Rwy 18,** railroad 311' from departure end of runway, 580' left of centerline, 23' AGL/882' MSL. Multiple trees beginning 2280' from departure end of runway, 100' left of centerline, up to 113' AGL/974' MSL. **Rwy 36,** road 120' from departure end of runway, 301' right of centerline, 15' AGL/884' MSL. Railroad 649' from departure end of runway, 578' right of centerline, 23' AGL/892' MSL. Multiple trees beginning 3400' from departure end of runway, on centerline, up to 92' AGL/959' MSL.

COSHOCTON, OH

RICHARD DOWNING (I40)
AMDT 1 80164 (FAA)

TAKE-OFF MINIMUMS: **Rwys 4, 22,** 300-1.

DAYTON, OH

DAYTON-WRIGHT BROTHERS (MGY)
AMDT 3 06271 (FAA)

NOTE: **Rwy 2,** multiple trees and road beginning 440' from departure end of runway, 257' left of centerline, up to 100' AGL/1053' MSL. Multiple trees beginning 672' from departure end of runway, 17' right of centerline, up to 100' AGL/1017' MSL. **Rwy 20,** multiple trees beginning 189' from departure end of runway, 494' left of centerline, up to 100' AGL/1009' MSL. Multiple poles and trees beginning 323' from departure end of runway, 364' right of centerline, up t o100' AGL/1026' MSL.

GREENE COUNTY-LEWIS A. JACKSON RGNL (I19)
AMDT 1 07074 (FAA)

NOTE: **Rwy 25,** multiple trees and tower beginning 469' from departure end of runway, 499' left of centerline, up to 96' AGL/998' MSL. Multiple trees and towers beginning 839' from departure end of runway, 460' right of centerline, up to 75' AGL/1005' MSL. **Rwy 7,** tree 1449' from departure end of runway, 592' right of centerline, 51' AGL/988' MSL.

JAMES M. COX DAYTON INTL (DAY)
AMDT 2 05020 (FAA)

TAKE-OFF MINIMUMS: **Rwy 18,** 300-1 or std. with a min. climb of 250' per NM to 1300'.

NOTES: **Rwy 18,** multiple tanks 4224' from departure end of runway, 1417' left of centerline, 173' AGL/1163' MSL.

DELAWARE, OH

DELAWARE MUNI (DLZ)

ORIG 07298 (FAA)

NOTE: **Rwy 10,** railroad 202' from departure end of runway, 549' left of centerline, 23' AGL/972' MSL. Poles 561' from departure end of runway, 558' right of centerline, up to 60' AGL/1004' MSL. Trees 1180' from departure end of runway, 686' left of centerline, up to 83' AGL/1027' MSL. Tree 1288' from departure end of runway, 733' right of centerline, 61' AGL/1005' MSL. **Rwy 28,** rising terrain beginning 35' from departure end of runway, 189' left of centerline, 950' MSL. Poles 992' from departure end of runway, 599' left of centerline, up to 61' AGL/1005' MSL. Pole 1126' from departure end of runway, 694' right of centerline, 44' AGL/988' MSL. Tree 1233' from departure end of runway, 742' right of centerline, 46' AGL/990' MSL.

EAST LIVERPOOL, OH

COLUMBIANA COUNTY (02G)

AMDT 2 86296 (FAA)

TAKE-OFF MINIMUMS: **Rwys 7, 25,** 400-1.

ELYRIA, OH

ELYRIA (1G1)

NOTE: **Rwy 9,** road 1198' from departure end of runway, 275' left of centerline, 15' AGL/774' MSL. Tree 2077' from departure end of runway, 778' right of centerline, 100' AGL/859' MSL. **Rwy 27,** tree 68' from departure end of runway, 237' left of centerline, 100' AGL/859' MSL. Tree 527' from departure end of runway, 454' right of centerline, 100' AGL/854' MSL.

EVANSVILLE, IN

EVANSVILLE RGNL (EVV)

AMDT 8 09183 (FAA)

TAKE-OFF MINIMUMS: **Rwy 9,** 300-1. **Rwy 27,** 300-1¾ or std. w/ a min. climb of 402' per NM to 800. **Rwy 36,** 300-1¾.

DEPARTURE PROCEDURE: **Rwy 22,** climb heading 203° to 1300 before turning right.

NOTE: **Rwy 4,** multiple trees beginning 1259' from DER, 693' left of centerline, up to 100' AGL/539' MSL. **Rwy 9,** water tank, levee, and multiple trees beginning 268' from DER, 13' right of centerline, up to 100' AGL/609' MSL. Multiple trees beginning 2233' from DER, 375' left of centerline, up to 67' AGL/516' MSL. **Rwy 18,** multiple buildings and vehicles on road beginning 265' from DER, 137' right of centerline, up to 62' AGL/447' MSL. Trees, lightpole, railroad, and vehicles on road beginning 268' from DER, 10' left of centerline, up to 100' AGL/489' MSL. **Rwy 22,** building vent, sign, poles, and vehicles on road beginning 167' from DER, 85' right of centerline, up to 36' AGL/421' MSL. Multiple trees beginning 2753' from DER, 337' right of centerline, up to 100' AGL/519' MSL. Buildings, trees, and light poles beginning 1128' from DER, 99' left of centerline, up to 125' AGL/495' MSL. **Rwy 27,** multiple trees, pole, and sign beginning 385' from DER, 87' right of centerline, up to 100' AGL/489' MSL. Poles, railroad, and vehicles on road beginning 418' from DER, 3' left of centerline, up to 43' AGL/422' MSL. Multiple trees and towers beginning 861' from DER, 151' left of centerline, up to 181' AGL/649' MSL. **Rwy 36,** multiple trees and building beginning 1563' from DER, 481' right of centerline, up to 100' AGL/619' MSL. Multiple trees and pole beginning 1425' from DER, 112' left of centerline, up to 84' AGL/514' MSL.

FINDLAY, OH

FINDLAY (FDY)

ORIG 07242 (FAA)

NOTE: **Rwy 7,** road 210' from departure end of runway, on runway centerline, 15' AGL/824' MSL. Multiple trees beginning 210' from departure end of runway, 111' right of centerline, up to 81' AGL/885' MSL. Building 2498' from departure end of runway, 878' right of centerline, 113' AGL/921' MSL. **Rwy 18,** tree 2786' from departure end of runway, 151' left of centerline, 72' AGL/876' MSL. **Rwy 25,** multiple elevators beginning 1825' from departure end of runway, 727' right of centerline, 78' AGL/869' MSL. Tree 4566' from departure end of runway, 687' right of centerline, 100' AGL/909' MSL. **Rwy 36,** pole 1192' from departure end of runway, 742' right of centerline, 36' AGL/835' MSL. Tree 1560' from departure end of runway, 499' left of centerline, 53' AGL/847' MSL.

FORT WAYNE, IN

FORT WAYNE INTL (FWA)

AMDT 2A 09127 (FAA)

DEPARTURE PROCEDURE: **Rwy 32,** climb runway heading to 1300' before turning left.

NOTE: **Rwy 5,** trees beginning 927' from DER, 499' left of centerline, 40' AGL/836' MSL. Fence 152' from DER, 521' right of centerline, 12' AGL/808' MSL. Railroad 834' from DER, 582' right of centerline, 23' AGL/820' MSL. Tree 152' from DER, 521' right of centerline, up to 42' AGL/842' MSL. **Rwy 9,** tower 3124' from DER, 1109' left of centerline, 111' AGL/910' MSL **Rwy 14,** tree 1079' from DER, 667' left of centerline, 23' AGL/825' MSL. **Rwy 27,** obstruction light 370' from DER, 230' left of centerline, 14' AGL/812' MSL. **Rwy 32,** trees beginning 3672' from DER, 611' left of centerline, up to 100' AGL/901' MSL.

SMITH FIELD (SMD)

AMDT 4 96340 (FAA)

TAKE-OFF MINIMUMS: **Rwys 5, 13, 31,** 300-1. **Rwy 23,** 800-2½ or 300-1 with a min. climb of 400' per NM to 2000.

DEPARTURE PROCEDURE: **Rwys 5, 13,** climb to 2000 on heading 090 before turning south. **Rwys 23, 31,** climb to 2000 on heading 270 before turning south.

FOSTORIA, OH

FOSTORIA METROPOLITAN (FZI)

ORIG 09071 (FAA)

NOTE: **Rwy 9,** trees beginning 1630' from DER, 480' right of centerline, up to 59' AGL/808' MSL. Trees beginning 319' from DER, 583' left of centerline, up to 74' AGL/823' MSL. **Rwy 27,** trees beginning 977' from DER, 387' left of centerline, up to 100' AGL/859' MSL. Building 1' from DER, 499' left of centerline, 8' AGL/758' MSL.

FREMONT, OH

FREMONT (14G)
AMDT 2 09295

TAKE-OFF MINIMUMS: **Rwys 18,36,** NA-Environmental.

NOTE: **Rwy 9,** train 268' from DER, 516' right of centerline, 23' AGL/677' MSL. Trees beginning 3269' from DER, 1265' right of centerline, up to 100' AGL/754' MSL. Multiple trees and buildings beginning 320' from DER, left and right of centerline, up to 100' AGL/749' MSL. **Rwy 27,** road 65' from DER, 4' right of centerline, 15' AGL/669' MSL. Trees beginning 2230' from DER, 834' left of centerline, up to 100' AGL/754' MSL.

FRENCH LICK, IN

FRENCH LICK MUNI (FRH)
ORIG 08101 (FAA)

NOTE: **Rwy 8,** Terrain 59' from departure end of runway, 86' left of centerline, 0' AGL/799' MSL. Trees beginning 184' from departure end of runway, 391' left of centerline, up to 100' AGL/889' MSL. Trees beginning 215' from departure end of runway, 148' right of centerline, up to 100' AGL/849' MSL. **Rwy 26,** Trees beginning 429' from departure end of runway, 90' left of centerline, up to 100' AGL/849' MSL. Trees beginning 580' from departure end of runway, 57' right of centerline, up to 100' AGL/909' MSL.

GALLIPOLIS, OH

GALLIA-MEIGS RGNL (GAS)
AMDT 2A 07270 (FAA)

TAKE-OFF MINIMUMS: **Rwy 5,** 500-1. **Rwy 23,** 800-3 or std. w/ min. climb of 331' per NM to 1700.

DEPARTURE PROCEDURE: **Rwy 5,** climb straight ahead to 2100 before proceeding on course.
Rwy 23, climb via 215° track to 1500 before proceeding on course.

GARY, IN

GARY/CHICAGO INTL (GYY)
AMDT 6 97310 (FAA)

TAKE-OFF MINIMUMS: **Rwy 2,** 300-1 or std. with a min. climb of 250' per NM to 900. **Rwy 30,** 300-1.

DEPARTURE PROCEDURE: **Rwy 12,** climb to 1200 before proceeding on course. **Rwy 20,** climb to 1200 on heading 220° before proceeding on course.

GEORGETOWN, OH

BROWN COUNTY (GEO)
AMDT 1 81358 (FAA)

TAKE-OFF MINIMUMS: **Rwys 17,35,** 300-1.

GOSHEN, IN

GOSHEN MUNI (GSH)
ORIG 08157 (FAA)

NOTE: **Rwy 5,** Transmission tower, 4050' from departure end of runway, 1247' right of centerline, 116' AGL/941' MSL. **Rwy 9,** Post 42' from departure end of runway, 251' right of centerline, 12' AGL/831' MSL. Pole 1030' from departure end of runway, 619' right of centerline, 37' AGL/862' MSL. Pole 986' from departure end of runway, 465' left of centerline, 30' AGL/855' MSL. Trees beginning 2493' from departure end of runway, 515' left of centerline, up to 100' AGL/966' MSL. **Rwy 23,** Daymarker 95' from departure end of runway, 85' right of centerline, 4' AGL/818' MSL. Terrain 3' from departure end of runway, 42' left of centerline, 0' AGL/821' MSL. Sign 47' from departure end of runway, 500' left of centerline, 3' AGL/822' MSL. Terrain 61' from departure end of runway, 418' left of centerline, 0' AGL/821' MSL. Road & vehicle 933' from departure end of runway, 736' left of centerline, 17' AGL/841' MSL. **Rwy 27,** Trees beginning 2173' from departure end of runway, 210' right of centerline, up to 100' AGL/914' MSL. Trees beginning 2072' from departure end of runway, 124' left of centerline, up to 100' AGL/914' MSL.

GREENCASTLE, IN

PUTNAM COUNTY (4I7)
ORIG 08045 (FAA)

NOTE: **Rwy 18,** Road and vehicle 365' from departure end of runway, 577' right of centerline, 23' AGL/832' MSL. Pole 598' from departure end of runway, 374' right of centerline, 27' AGL/836' MSL. Pole 640' from departure end of runway, 423' right of centerline, 28' AGL/837' MSL. Building 773' from departure end of runway, 525' right of centerline, 32' AGL/841' MSL. Trees beginning 554' from departure end of runway, 428' right of centerline, up to 100' AGL/899' MSL. Fence 128' from departure end of runway, 306' left of centerline, 13'AGL/822'MSL. Fence 214' from departure end of runway, 307' left of centerline, 16'AGL/825'MSL. Trees beginning 901' from departure end of runway, 277' left of centerline, up to 100' AGL/865' MSL. **Rwy 36,** Terrain beginning 5' from departure end of runway, 85' right of centerline, 0' AGL/854' MSL. STPL 1836' from departure end of runway, 310' right of centerline 45' AGL/894' MSL. Trees beginning 658' from departure end of runway, 115' right of centerline, up to 100' AGL/959' MSL. Antenna on building 2725' from departure end of runway, 18' left of centerline, 64' AGL/913' MSL. Trees beginning 30' from departure end of runway, 250' left of centerline, up to 100' AGL/949' MSL.

GREENSBURG, IN

GREENSBURG MUNI (I34)
AMDT 1A 09099 (FAA)

TAKE-OFF MINIMUMS: **Rwy 36,** 300-1.

GRIFFITH, IN

GRIFFITH - MERRILLVILLE (05C)
AMDT 4 07074 (FAA)

TAKE-OFF MINIMUMS: **Rwy 8,** 300-1 or std. w/ min. climb of 502' per NM to 1000.

NOTE: **Rwy 8,** multiple trees, and poles beginning 5' from departure end of runway, 165' left of centerline, up to 100' AGL/744' MSL. Tower 4170' from departure end of runway, 1386' left of centerline, 259' AGL/900' MSL. Multiple trees, and poles beginning 125' from departure end of runway, 68' right of centerline, up to 100' AGL/744' MSL. **Rwy 26,** multiple poles, trees, and building beginning 146' from departure end of runway, 21' right of centerline, up t o 100' AGL/744' MSL. Multiple trees, and poles beginning 25' from departure end of runway, 84' left of centerline, up t o 100' AGL/744' MSL.

HAMILTON, OH

BUTLER COUNTY RGNL (HAO)
AMDT 3 03191 (FAA)

TAKE-OFF MINIMUMS: **Rwy 11,** 800-3 or std. with a min. climb of 230' per NM to 1600. **Rwy 29,** 300-1 or std. with a min. climb of 420' per NM to 900.

DEPARTURE PROCEDURE: **Rwy 11,** climb to 1700 via heading 110° before turning on course. **Rwy 29,** climb to 1700 via heading 290° before turning on course.

NOTE: **Rwy 11,** trees 2670' from departure end of runway, 1200' left of centerline, 100' AGL/757' MSL. **Rwy 29,** trees 3692' from departure end of runway, 1328' right of centerline, 100' AGL/835' MSL.

HARRISON, OH

CINCINNATI WEST (I67)
AMDT 2 07186 (FAA)

TAKE-OFF MINIMUMS: **Rwy 1,** 500-3 or std. w/ min. climb of 385' per NM to 1200. **Rwys 9, 27,** NA-obstacles. **Rwy 19,** 500-3 or std. w/ min. climb of 253' per NM to 1300.

NOTE: **Rwy 1,** multiple trees beginning 5364' from departure end of runway, 180' right of centerline, up to 100' AGL/915' MSL. Multiple trees beginning 5596' from departure end of runway, 1180' left of centerline up to 100' AGL/909' MSL. Multiple trees beginning 1.5 NM from departure end of runway, 2293' left of centerline, up to 200' AGL/849' MSL. **Rwy 19,** road 23' from departure end of runway, on centerline, 15' AGL/599' MSL.

HILLSBORO, OH

HIGHLAND COUNTY (HOC)
AMDT 2 91150 (FAA)

TAKE-OFF MINIMUMS: **Rwys 5, 23,** 300-1.

HUNTINGBURG, IN

HUNTINGBURG (HNB)

TAKE-OFF MINIMUMS: **Rwy 9,** 300-1.

HUNTINGTON, IN

HUNTINGTON MUNI (HHG)
AMDT 1 87183 (FAA)

TAKE-OFF MINIMUMS: **Rwy 9,** 400-1.

INDIANAPOLIS, IN

EAGLE CREEK AIRPARK (EYE)
AMDT 1 08325 (FAA)

DEPARTURE PROCEDURE: **Rwy 3,** climb heading 360° to 2000 before turning right.

NOTE: **Rwy 3,** antenna on building 859' from departure end of runway, 524' right of centerline, 37' AGL/851' MSL. Pole 507' from departure end of runway, 631' left of centerline, 36' AGL/860' MSL. Trees beginning 2014' from departure end of runway, 583' left of centerline, up to 85' AGL/904' MSL. **Rwy 21,** trees beginning 677' from departure end of runway, 267' right of centerline, up to 87' AGL/901' MSL. Vehicle/road 310' from departure end of runway, 398' right of centerline, 19' AGL/833' MSL. Trees beginning 1383' from departure end of runway, 57' left of centerline, up to 90' AGL/904' MSL. Airport beacon 10' from departure end of runway, 464' left of centerline, 58' AGL/867' MSL. Flagpole 167' from departure end of runway, 385' left of centerline, 29' AGL/848' MSL. Poles beginning 694' from departure end of runway, 451' left of centerline, up to 40' AGL/849' MSL. Antennas on buildings beginning 363' from departure end of runway, 258' left of centerline, 9' AGL/828' MSL.

GREENWOOD MUNI (HFY)
AMDT 2 07186 (FAA)

TAKE-OFF MINIMUMS: **Rwy 19,** 300-1 or std. w/ min. climb of 441' per NM to 1200.

DEPARTURE PROCEDURE: **Rwy 1,** climb heading 010° to 1500 before turning right.

NOTE: **Rwy 1,** hangar 71' from departure end of runway, 499' left of centerline, 25' AGL/839' MSL. Pole 869' from departure end of runway, 627' left of centerline, 45' AGL/864' MSL. Multiple trees beginning 1274' from departure end of runway, 394' left of centerline, up to 85' AGL/899' MSL. Building 558' from departure end of runway, 409' right of centerline, 35' AGL/858' MSL. Multiple light poles beginning 1262' from departure end of runway, 482' right of centerline, up to 35' AGL/860' MSL. Multiple trees beginning 2536' from departure end of runway, 375' right of centerline, up t o 77' AGL/898' MSL. **Rwy 19,** multiple trees beginning 1168' from departure end of runway, 288' left of centerline, up to 57' AGL/914' MSL. Multiple trees beginning 1577' from departure end of runway, 379' right of centerline, up to 96' AGL/923' MSL. Water tower 4222' from departure end of runway, 25' right of centerline, 114' AGL/971' MSL. Tank 4134' from departure end of runway, 71' right of centerline, 120' AGL/985' MSL.

HENRICKS COUNTY-GORDON GRAHAM FLD (2R2)
ORIG 08157 (FAA)

NOTE: **Rwy 18,** Pole 746' from departure end of runway, on centerline, 60' AGL/919' MSL, trees 2091' from departure end of runway, 625' left of centerline, 100' AGL/949' MSL. **Rwy 36,** Trees 1302' from departure end of runway, 648' right of centerline, 100' AGL/1009' MSL. Tree 3529' from departure end of runway, 788' right of centerline, 100' AGL/1009' MSL. Tree 5244' from departure end of runway, 1005' left of centerline, 100' AGL/1029' MSL.

INDIANAPOLIS, IN (CON'T)

INDIANAPOLIS EXECUTIVE (TYQ)
ORIG 08269 (FAA)
NOTE: **Rwy 18,** trees beginning 1452' from departure end of runway, 204' left of centerline, up to 53' AGL/972' MSL. **Rwy 36,** multiple hangers beginning 596' from departure end of runway, 356' left of centerline, up to 45' AGL/975' MSL, trees 2374' from departure end of runway, 641' left to right of centerline, 100' AGL/1019' MSL.

INDIANAPOLIS INTL (IND)
ORIG 07018 (FAA)
NOTES: **Rwy 5R,** tower 3756' from departure end of runway, 1048' left of centerline, 111' AGL/901' MSL. Rod on obstruction light dome 3765' from departure end of runway, 1076' left of centerline, 107' AGL/901' MSL. **Rwy 5L,** rod on obstruction light MCWV tower 5052' from departure end of runway, 140' right of centerline, 129' AGL/923' MSL. Tower 5073' from departure end of runway, 93' right of centerline, 128'AGL/923'MSL. **Rwy 23R,** tree 5159' from departure end of runway, 1144' right of centerline, 101' AGL/870' MSL. Tree 3295' from departure end of runway, 948' right of centerline, 78' AGL/822' MSL. **Rwy 32,** antenna 2370' from departure end of runway, 755' right of centerline, 70' AGL/849' MSL. Tree 2244' from departure end of runway, 707' right of centerline, 66' AGL/845' MSL.

INDIANAPOLIS METROPOLITAN (UMP)
AMDT 2 92281 (FAA)
TAKE-OFF MINIMUMS: **Rwys 15, 33,** 300-1.
DEPARTURE PROCEDURE: **Rwys 15, 33,** climb on runway heading to 1400 before turning westbound.

MOUNT COMFORT (MQJ)
AMDT 1 84243 (FAA)
DEPARTURE PROCEDURE: **Rwy 25,** climb to 2000 on a 270° heading before turning south.

JACKSON, OH

JAMES A. RHODES (I43)
AMDT 4 07354 (FAA)
TAKE-OFF MINIMUMS: **Rwy 1,** 300-2. **Rwy 19,** 300-1½
DEPARTURE PROCEDURE: **Rwy 1,** climb heading 010° to 1500 before turning left.
NOTE: **Rwy 1,** car on road 475' from departure end of runway, on centerline, 15' AGL/754' MSL. Trees 2570' from departure end of runway, 613' left of centerline, 100' AGL/936' MSL. Trees 2810' from departure end of runway, 1243' left of centerline, 100' AGL/989' MSL. Trees 1.1 NM from departure end of runway, 1355' right of centerline, 100' AGL/949' MSL. Tank 1.4 NM from departure end of runway, 1870' left of centerline, 112' AGL/1008' MSL. Rising terrain beginning 1320' from departure end of runway, 316' left of centerline, up to 889' MSL. **Rwy 19,** pole 1137' from departure end of runway, 114' left of centerline, 39' AGL/779' MSL. Trees 1869' from departure end of runway, 138' right of centerline, 100' AGL/840' MSL. Trees 2349' from departure end of runway, 103' right of centerline, 100' AGL/899' MSL. Rising terrain beginning 386' from departure end of runway, 587' right of centerline, up to 989' MSL.

JEFFERSONVILLE, IN

CLARK RGNL (JVY)
AMDT 1 95061 (FAA)
TAKE-OFF MINIMUMS: **Rwy 14,** 300-1.
DEPARTURE PROCEDURE: **Rwys 14, 18, 36,** climb on runway heading to 2000 before turning west. **Rwy 32,** climb to 2000 heading 360° before turning west.

KENDALLVILLE, IN

KENDALLVILLE MUNI (C62)
AMDT 2 86016 (FAA)
DEPARTURE PROCEDURE: **Rwys 10, 28,** climb runway heading to 1500 before turning south.

KENTLAND, IN

KENTLAND MUNI (50I)
ORIG 88322 (FAA)
TAKE-OFF MINIMUMS: **Rwy 27,** 400-1.
DEPARTURE PROCEDURE: **Rwy 27,** turn left as soon as practicable; climb to 1000' on 240° heading before proceeding on course.

KENTON, OH

HARDIN COUNTY (I95)
AMDT 2 83342 (FAA)
TAKE-OFF MINIMUMS: **Rwys 4, 22,** 300-1.

KNOX, IN

STARKE COUNTY (OXI)
ORIG 08269 (FAA)
TAKE-OFF MINIMUMS: **Rwys 9, 27,** NA-Environmental.
NOTE: **Rwy 36,** tree 1234' from departure end of runway, 477' left of centerline, 35' AGL/715' MSL. **Rwy 18,** trees beginning 2442' from departure end of runway, 135' right of centerline, up to 86' AGL/769' MSL. Tree 21' from departure end of runway, 449' left of centerline, 5' AGL/668' MSL.

LA PORTE, IN

LA PORTE MUNI (PPO)
AMDT 2 07186 (FAA)
NOTE: **Rwy 14,** power line beginning 4937' from departure end of runway, 670' right of centerline, 150' AGL/934' MSL. **Rwy 20,** power line beginning 3978' from departure end of runway, 1566' left of centerline, 150' AGL/959' MSL.

LAFAYETTE, IN
PURDUE UNIVERSITY (LAF)
AMDT 1 07130 (FAA)
TAKE-OFF MINIMUMS: **Rwy 5,** 300-1¼ or std. w/ min. climb of 342' per NM to 1000. **Rwy 23,** 400-2¼ or std. w/ min. climb of 220' per NM to 1100.
NOTE: **Rwy 5,** multiple trees and buildings beginning 290' from departure end of runway, 33' right of centerline, up to 167' AGL/782' MSL. Multiple trees, buildings, and antennas beginning 45' from departure end of runway, 25' left of centerline, up to 227' AGL/850' MSL. **Rwy 10,** multiple trees beginning 1230' from departure end of runway, 394' right of centerline, up to 80' AGL/639' MSL. Antenna 258' from departure end of runway, 323' left of centerline, 14' AGL/613' MSL. **Rwy 23,** rod on obstruction light tower 1.9 NM from departure end of runway, 272' left of centerline, 314' AGL/915' MSL. Tree 90' from departure end of runway, 235' left of centerline, 34' AGL/613' MSL. **Rwy 28,** multiple trees beginning 397' from departure end of runway, 461' left of centerline, up to 57' AGL/656' MSL. Tree 3382' from departure end of runway, 973' right of centerline, 68' AGL/697' MSL.

LANCASTER, OH
FAIRFIELD COUNTY (LHQ)
AMDT 1 90347 (FAA)
TAKE-OFF MINIMUMS: **Rwy 10,** 400-1. **Rwy 28,** 300-1.

LIMA, OH
LIMA ALLEN COUNTY (AOH)
ORIG 09071 (FAA)
TAKE-OFF MINIMUMS: **Rwys 14, 32,** NA-Environmental.
NOTE: **Rwy 9,** bush and trees beginning 163' from DER, 311' right of centerline, up to 100' AGL/1104' MSL. **Rwy 27,** bush and trees beginning 175' from DER, 128' right of centerline, up to 100' AGL/1044' MSL. Antenna on building and trees beginning 67' from DER, 257' left of centerline, up to 100' AGL/1054' MSL.

LOGANSPORT, IN
LOGANSPORT/CASS COUNTY (GGP)
ORIG 07186 (FAA)
NOTE: **Rwy 9,** transmission pole 426' from departure end of runway, 486' left of centerline, 30' AGL/768' MSL. Transmission pole 432' from departure end of runway, 457' right of centerline, 30' AGL/768' MSL. Pole 427' from departure end of runway, 285' left of centerline, 29' AGL/767' MSL. Pole 427' from departure end of runway, 283' right of centerline, 29' AGL/767' MSL. Road with vehicle 448' from departure end of runway, on runway centerline, 15' AGL/751' MSL. Road with vehicle 450' from departure end of runway, 419' right of centerline, 15' AGL/751' MSL. Road with vehicle 447' from departure end of runway, 416' left of centerline, 15' AGL/750' MSL.

LONDON, OH
MADISON COUNTY (UYF)
ORIG 90347 (FAA)
TAKE-OFF MINIMUMS: **Rwy 27,** 300-1.

LORAIN/ELYRIA, OH
LORAIN COUNTY RGNL (LPR)
ORIG 06159 (FAA)
NOTE: **Rwy 7,** multiple trees beginning 973' from departure end of runway, 293' right of centerline, up to 75' AGL/865' MSL. Multiple trees beginning 839' from departure end of runway, 636' left of centerline, up to 47' AGL/836' MSL. **Rwy 25,** bush 583' from departure end of runway, 468' right of centerline, 10' AGL/809' MSL. Tree 1587' from departure end of runway, 698' left of centerline, 44' AGL/838' MSL. Tree 2277' from departure end of runway, 435' right of centerline, 58' AGL/854' MSL.

LOWELL, IN
LOWELL (C97)
ORIG 82357 (FAA)
TAKE-OFF MINIMUMS: **Rwy 36,** 300-1.

MADISON, IN
MADISON MUNI (IMS)
AMDT 2 08213(FAA)
NOTE: **Rwy 3,** Vehicle on road 625' from departure end of runway, on centerline, 15' AGL/844' MSL. Antenna on building and trees beginning 170' from departure end of runway, 432' left of centerline, up to 85' AGL/904' MSL. Poles and trees beginning 526' from departure end of runway, 64' right of centerline, up to 130' AGL/959' MSL. **Rwy 21,** Vehicle on road 575' from departure end of runway, on centerline, 15' AGL/824' MSL. Trees and poles beginning 285' from departure end of runway, 16' left of centerline, up to 157' AGL/947' MSL. Trees and pole beginning 116' from departure end of runway, 1' right of centerline, up to 123' AGL/912' MSL.

MANSFIELD, OH
MANSFIELD LAHM RGNL (MFD)
ORIG 09071 (FAA)
NOTE: **Rwy 5,** trees 1337' from DER, 209' right of centerline, 78' AGL/1318' MSL. Trees 1494' from DER, 410' left of centerline, 80' AGL/1330' MSL. **Rwy 32,** trees 2399' from DER, 868' right of centerline, 90' AGL/1310' MSL.

MARION, IN
MARION MUNI (MZZ)
ORIG 02164 (FAA)
NOTE: **Rwy 4,** trees 938' from departure end of runway, 696' right of centerline, 67' AGL/914' MSL. **Rwy 15,** trees 627' from departure end of runway, 263' right of centerline, 82' AGL/929' MSL. **Rwy 22,** trees 1144' from departure end of runway, 783' left of centerline, 89' AGL/936' MSL. **Rwy 33,** trees 1005' from departure end of runway, 728' left of centerline, 99' AGL/946' MSL.

MARION, OH
MARION MUNI (MNN)
ORIG 07242 (FAA)
DEPARTURE PROCEDURE: **Rwy 25,** climb heading 245° to 1600 before turning right.
NOTE: **Rwy 7,** trees 3283' from departure end of runway, 273' left of centerline, up to 89' AGL/1088' MSL. Multipletrees beginning 36' from departure end of runway, 280' right of centerline, up to 43' AGL/1033' MSL. **Rwy 13,** trees 512' from departure end of runway, 277' left of centerline, up to 100' AGL/1089' MSL. Road 491' from departure end of runway, 15' AGL/1004' MSL. **Rwy 25,** obstruction light on antenna 419' from departure end of runway, 407' left of centerline, up to 13' AGL/1008' MSL. Road 434' from departure end of runway, 15' AGL/1004' MSL. **Rwy 31,** trees 2186' from departure end of runway, up to 100' AGL/1089' MSL. Road 355' from departure end of runway, 485' left of centerline, 15' AGL/1004' MSL.

MARYSVILLE, OH
UNION COUNTY (MRT)
AMDT 2 89320 (FAA)
TAKE-OFF MINIMUMS: **Rwy 9,** 300-1.

MEDINA, OH
MEDINA MUNI (1G5)
AMDT 3 06159 (FAA)
NOTE: **Rwy 1,** multiple trees beginning 562' from departure end of runway, 588' left of centerline, up to 100' AGL/1279' MSL. Multiple trees beginning 1925' from departure end of runway, on centerline, up to 100' AGL/1319' MSL. **Rwy 9,** multiple trees beginning 305' from departure end of runway, 396' right of centerline, up to 100' AGL/1249' MSL, tower 3627' from departure end of runway, 534' left of centerline, 150' AGL/1282' MSL. **Rwy 19,** multiple trees beginning at departure end of runway, 112' left of centerline, up to 100' AGL/1249' MSL. **Rwy 27,** multiple trees beginning at departure end of runway, 345' left of centerline, up to 100' AGL/1319' MSL, multiple trees beginning at departure end of runway, 366' right of centerline, up to 100' AGL/1279' MSL.

MICHIGAN CITY, IN
MICHIGAN CITY MUNI (MGC)
TAKE-OFF MINIMUMS: **Rwy 2,** 300-1.
DEPARTURE PROCEDURE: **Rwy 20,** climb to 1300 on runway heading before turning east.

MIDDLEFIELD, OH
GEAUGA COUNTY (7G8)
AMDT 3 06159 (FAA)
NOTE: **Rwy 11,** railroad 331' from departure end of runway, 315' left of centerline, 23' AGL/1182' MSL. Trees 3144' from departure end of runway, 671' left of centerline, 100' AGL/1249' MSL. **Rwy 29,** railroad 349' from departure end of runway, 521' left of centerline, 23' AGL/1212' MSL. Multiple buildings 993' from departure end of runway, 294' right of centerline, 40' AGL/1239' MSL. Trees 1875' from departure end of runway, 791' right of centerline, 100' AGl/1319' MSL. Tank 2251' from departure end of runway, 578' right of centerline, 125' AGL/1315' MSL.

MIDDLETOWN, OH
MIDDLETOWN RGNL/HOOK FIELD (MWO)
AMDT 1 09295(FAA)
TAKE-OFF MINIMUMS: **Rwys 8, 23,** 300-1.
Rwy 26, 400-1.
DEPARTURE PROCEDURE: **Rwys 5, 8, 23, 26,** climb on runway heading to 1700' before proceeding on course.

MILLERSBURG, OH
HOLMES COUNTY (10G)
ORIG 83048 (FAA)
TAKE-OFF MINIMUMS: **Rwys 9, 27,** 300-1.

MONTICELLO, IN
WHITE COUNTY (MCX)
AMDT 2 85101 (FAA)
TAKE-OFF MINIMUMS: **Rwy 36,** 600-1 or std. with a min. climb of 250' per NM to 1300.

MT. GILEAD, OH
MORROW COUNTY (4I9)
AMDT 1 83048
TAKE-OFF MINIMUMS: **Rwys 10, 28,** 300-1.

MT. VERNON, OH
KNOX COUNTY (4I3)
ORIG 09015 (FAA)
NOTE: **Rwy 28,** trees 2121' from departure end of runway, 361' right of centerline, 47' AGL/1246' MSL.

MUNCIE, IN
DELAWARE COUNTY-JOHNSON FIELD (MIE)
AMDT 3 06271 (FAA)
NOTE: **Rwy 2,** multiple trees beginning 888' from departure end of runway, 412' right of centerline, up to 47' AGL/980' MSL. Tree and towers beginning 2554' from departure end of runway, 46' left of centerline, up to 113' AGL/1046' MSL. **Rwy 14,** tree 2061' from departure end of runway, 1004' right of centerline, 69' AGL/1005' MSL. **Rwy 20,** tree 1463' from departure end of runway, 564' left of centerline, 82' AGL/1019' MSL. Multiple trees beginning 1119' from departure end of runway, 171' right of centerline, up to 62' AGL/999' MSL. **Rwy 32,** multiple bushes beginning 86' from departure end of runway, 447' left of centerline, up to 12' AGL/940' MSL.

NAPPANEE, IN
NAPPANEE MUNI (C03)
AMDT 1 81036 (FAA)
TAKE-OFF MINIMUMS: **Rwy 9,** 300-1.

NEW LEXINGTON, OH
PERRY COUNTY (I86)
ORIG 84243 (FAA)
TAKE-OFF MINIMUMS: **Rwys 8, 26,** 300-1.

NEW PHILADELPHIA, OH
HARRY CLEVER FIELD (PHD)
TAKE-OFF MINIMUMS: **Rwys 11, 29,** 600-1. **Rwy 14,** 500-1 or std. with a min. climb to 330' per NM to 1600. **Rwy 32,** 500-1 or std. with a min. climb 380' per NM to 1600.
DEPARTURE PROCEDURE: **Rwys 11,14,29,32,** climb runway heading to 1600 before turning.

NEWARK, OH
NEWARK-HEATH (VTA)
AMDT 2 08213 (FAA)
TAKE-OFF MINIMUMS: **Rwy 9,** 600-3 or std. w/ min. climb of 354' per NM to 1800.
DEPARTURE PROCEDURE: **Rwy 9,** climb heading 093° to 1800 before proceeding on course.
NOTE: **Rwy 9,** Vehicle road 306' from departure end of runway, 164' right of centerline, 15' AGL/894' MSL. Trees beginning 2.2 NM from departure end of runway, 1906' right of centerline, 100' AGL/1159' MSL.

NORTH VERNON, IN
NORTH VERNON (OVO)
ORIG 09239 (FAA)
NOTE: **Rwy 5,** tree 1866' from DER, 690' left of centerline, 62' AGL/821' MSL. Tree 428' from DER, 516' right of centerline, 22' AGL/781' MSL. **Rwy 15,** fence beginning 259' from DER, crossing left to right, 11' AGL/765' MSL. Trees beginning 469' from DER, 100' left of centerline, up to 115' AGL/864' MSL. Tree 1509' from DER, 472' right of centerline, 59' AGL/818' MSL. **Rwy 23,** trees beginning 1856' from DER, 94' left of centerline, up to 93' AGL/842' MSL. Tree 3348' from DER 675' right of centerline, 97' AGL/846' MSL. **Rwy 33,** fence beginning 304' from DER, 138' left of centerline, 11' AGL/761' MSL. Tree 2592' from DER, 596' left of centerline, 90' AGL/839' MSL. Power pole 751' from DER, 102' right of centerline, 25' AGL/774' MSL.

NORWALK, OH
NORWALK-HURON COUNTY (5A1)
AMDT 1 83286 (FAA)
TAKE-OFF MINIMUMS: **Rwys 10, 28,** 300-1.

OTTAWA, OH
PUTNAM COUNTY (OWX)
ORIG 09239 (FAA)
NOTE: **Rwy 9,** trees 1342' from DER, 578' right of centerline, 100' AGL/854' MSL. Tree 1978' from DER, 5' left of centerline, 50' AGL/814' MSL. **Rwy 27,** road 1' from DER, 219' right of centerline, 15' AGL/768' MSL. Multiple trees and pole beginning 1606' from DER, 303' left of centerline, up to 100' AGL/854' MSL.

OXFORD, OH
MIAMI UNIVERSITY (OXD)
AMDT 1 96312 (FAA)
TAKE-OFF MINIMUMS: **Rwys 5, 23,** 300-1.

PAINESVILLE, OH
CONCORD AIRPARK (2G1)
AMDT 2 06159 (FAA)
TAKE-OFF MINIMUMS: **Rwy 20,** 400-1¾ or std. w/ a min. climb of 310' per NM to 1500.
NOTE: **Rwy 2,** numerous trees beginning 503' from departure end of runway, 146' left of centerline, up to 100' AGL/1039' MSL. **Rwy 20,** numerous trees beginning 544' from departure end of runway, 25' right of centerline, up to 200' AGL/1349' MSL. Tower 1.2 NM from departure end of runway, 2020' right of centerline, 114' AGL/1223' MSL.

PERU, IN
PERU MUNI (I76)
AMDT 3 07018 (FAA)
NOTE: **Rwy 1,** multiple trees beginning 2201' from departure end of runway, 321' left of centerline, 100' AGL/879' MSL. Road plus vehicle beginning 407' from departure end of runway, 1524' right of centelrine, 15' AGL/794' MSL. Trees beginning 1656' from departure end of runway, 815' right of centerline, 100' AGL/879' MSL. **Rwy 19,** multiple trees beginning 44' from departure end of runway, 204' left of centerline, 100' AGL/869' MSL. Multiple trees beginning 588' from departure end of runway, 134' right of centerline, 100' AGL/859' MSL.

PHILLIPSBURG, OH
PHILLIPSBURG (3I7)
TAKE-OFF MINIMUMS: **Rwy 21,** 300-1.

PLYMOUTH, IN
PLYMOUTH MUNI (C65)
ORIG 74199 (FAA)
TAKE-OFF MINIMUMS: **Rwys 10, 28,** 300-1.

PORT CLINTON, OH
CARL R. KELLER FIELD (PCW)
AMDT 6 09183 (FAA)
TAKE-OFF MINIMUMS: **Rwy 27,** std. w/ min. climb of 250' per NM to 1600 or 1000-2½ for climb in visual conditions.
DEPARTURE PROCEDURE: **Rwy 27,** for climb in visual conditions: cross Carl R Keller Field at or above 1400 MSL before proceeding on course.
NOTE: **Rwy 9,** multiple trees and poles beginning 417' from DER, 398' left of centerline, up to 78' AGL/668' MSL. Multiple trees and poles beginning 407' from DER, 550' right of centerline, up to 67' AGL/657' MSL. **Rwy 18,** multiple trees beginning 626' from DER, 424' left of centerline, up to 100' AGL/684' MSL. Trees 511' from DER, 471' right of centerline, 100' AGL/684' MSL. Vehicles on road 475' from DER, 31' right of centerline, 15' AGL/604' MSL. **Rwy 27,** multiple trees beginning 1210' from DER, 176' left of centerline, up to 65' AGL/650' MSL. Pole 1066' from DER, 609' right of centerline, 35' AGL/620' MSL. Multiple trees beginning 2558' from DER, 311' right of centerline, up to 91' AGL/676' MSL. **Rwy 36,** trees 558' from DER, 406' left of centerline, 100' AGL/684' MSL. Trees 770' from DER, 564' right of centerline, 100' AGL/679' MSL. Trees 5097' from DER, 1661' right of cenerline, 100' AGL/719' MSL.

PORTLAND, IN
PORTLAND MUNI (PLD)
ORIG 08213 (FAA)
TAKE-OFF MINIMUMS: **Rwys 18, 36,** NA - Turf runways.
NOTE: **Rwy 9,** multiple trees beginning 2290' from departure end of runway, 517' right of centerline, up to 100' AGL/1029' MSL. Multiple trees beginning 2843' from departure end of runway, 36' left of centerline, up to 100' AGL/1029' MSL. **Rwy 27,** barn 1082' from departure end of runway, 572' right of centerline, 34' AGL/945' MSL. Multiple trees beginning 263' from departure end of runway, 551' left of centerline, up to 100' AGL/1019' MSL.

PORTSMOUTH, OH
GREATER PORTSMOUTH RGNL (PMH)
AMDT 2 91262 (FAA)
DEPARTURE PROCEDURE: **Rwy 18,** climb heading 170° to 1200 before proceeding on course.

RENSSELAER, IN
JASPER COUNTY (RZL)
AMDT 1 88014 (FAA)
TAKE-OFF MINIMUMS: **Rwys 9, 18, 27, 36,** 300-1.
DEPARTURE PROCEDURE: **Rwys 9, 18, 27, 36,** climb to 1100 on runway heading before proceeding on course.

RICHMOND, IN
RICHMOND MUNI (RID)
ORIG 09183 (FAA)
TAKE-OFF MINIMUMS: **Rwys 10, 28,** NA-Environmental.
NOTE: **Rwy 15,** tree 2970' from DER, 198' right of centerline, 86' AGL/1226' MSL. **Rwy 24,** road and antenna beginning 298' from DER, 7' right of centerline, up to 22' AGL/1156' MSL. Trees beginning 1185' from DER, 529' left of centerline, up to 40' AGL/1174' MSL. Obstruction light on localizer 300' from DER, on centerline, 8' AGL/1142' MSL. **Rwy 33,** trees beginning 515' from DER, 283' right of centerline, up to 48' AGL/1175' MSL. Antenna and trees beginning 1041' from DER, 141' left of centerline, up to 71' AGL/1198' MSL.

ROCHESTER, IN
FULTON COUNTY (RCR)
ORIG 08269 (FAA)
NOTE: **Rwy 11,** terrain 469' right of centerline, 797' MSL. Trees beginning 619' from from departure end of runway, 181' right of centerline, up to 105' AGL/894' MSL. Trees beginning 2534' from departure end of runway, 27' left of centerline, up to 97' AGL/886' MSL. **Rwy 29,** pole 1' from departure end of runway, 480' left of centerline, 28' AGL/817' MSL. Pole 195' from departure end of runway, 460' left of centerline, 28' AGL/817' MSL. Pole 524' from departure end of runway, 503' left of centerline, 33' AGL/823' MSL. Vehicle on road 578' from departure end of runway, 100' left of centerline, 15' AGL/804' MSL. Vent on building 890' from departure end of runway, 262' left of centerline, 23' AGL/812' MSL. Trees beginning 614' from departure end of runway, 355' left of centerline, up to 87' AGL/876' MSL. Vent on building 229' from departure end of runway, 525' right of centerline, 40' AGL/829' MSL. Pole 843' from departure end of runway, 94' right of centerline, 23' AGL/812' MSL. Trees beginning 883' from departure end of runway, 152' right of centerline, up to 103' AGL/892' MSL.

ST. CLAIRSVILLE, OH
ALDERMAN (2P7)
AMDT 2 91010 (FAA)
TAKE-OFF MINIMUMS: **Rwys 1, 19,** 300-1.
DEPARTURE PROCEDURE: **Rwys 1, 19,** climb on runway heading to 1800 before proceeding on course.

SALEM, OH
SALEM AIRPARK, INC (38D)
AMDT 1 97058 (FAA)
DEPARTURE PROCEDURE: **Rwys 10, 28,** climb runway heading to 2200 before turning south.

SANDUSKY, OH
GRIFFING-SANDUSKY (SKY)
AMDT 1 81162 (FAA)
TAKE-OFF MINIMUMS: **Rwys 9, 18, 27,** 300-1.

SEBRING, OH
TRI-CITY (3G6)
ORIG 76036 (FAA)
DEPARTURE PROCEDURE: **Rwys 17, 35,** climb runway heading to 3000 before turning east.

SEYMOUR, IN
FREEMAN MUNI (SER)
ORIG 07130 (FAA)
DEPARTURE PROCEDURE: **Rwy 5,** climb heading 046° to 1100 before turning left. **Rwy 14,** climb heading 136° to 1100 before turning right.
NOTE: **Rwy 5,** multiple trees beginning 845' from departure end of runway, 523' left of centerline, up to 90' AGL/669' MSL. Multiple towers beginning 2870' from departure end of runway, 1231' left of centerline, up to 73' AGL/657' MSL. Multiple trees beginning 1035' from departure end of runway, 691' right of centerline, up to 73' AGL/652' MSL. **Rwy 14,** multiple trees beginning 2285' from departure end of runway, 309' right of centerline, up to 78' AGL/657' MSL. **Rwy 32,** multiple trees beginning 2339' from departure end of runway, 383' left of centerline, up to 63' AGL/662' MSL.

SHELBY, OH
SHELBY COMMUNITY (12G)
AMDT 1 83076 (FAA)
TAKE-OFF MINIMUMS: **Rwys 3, 18, 21, 36,** 300-1.

SHELBYVILLE, IN
SHELBYVILLE MUNI (GEZ)
AMDT 4 99112 (FAA)
DEPARTURE PROCEDURE: **Rwy 1,** climb runway heading to 1400 before turning west on course. **Rwys 9, 19,** climb runway heading to 1300 before turning on course. **Rwy 27,** climb to 1500 on heading 240° before turning turning north on course.

SIDNEY, OH
SIDNEY MUNI (I12)
AMDT 2 91038 (FAA)
TAKE-OFF MINIMUMS: **Rwys 5, 10, 23,** 300-1. **Rwy 28,** 300-1 or std. with a min. climb of 350' per NM to 1300.

SOUTH BEND, IN

SOUTH BEND RGNL (SBN)
AMDT 9 09239 (FAA)

TAKE-OFF MINIMUMS: **Rwy 27R,** 300-1¼ or std. w/ min. climb of 240' per NM to 1100. Alternatively, with standard take-off minimums and a normal 200'/NM climb gradient, take-off must occur no later than 1800' prior to DER.

DEPARTURE PROCEDURE: **Rwy 9R,** climb heading 092° to 2000 before turning South. **Rwy 18,** climb heading 182° to 2000 before turning East.

NOTE: **Rwy 9L,** tree 1226' from DER, 367' left of centerline, 60' AGL/831' MSL. Tree 1332' from DER, 93' right of centerline, 50' AGL/822' MSL. Transmission tower 2159' from DER, 392' left of centerline, 117' AGL/872' MSL. **Rwy 18,** powerline and fence 199' from DER, left and right of centerline, up to 20' AGL/775' MSL. Multiple trees and poles beginning 684' from DER, from 829' left to 720' right of centerline, up to 80' AGL/849' MSL. **Rwy 27L,** light pole 665' from DER, 479' left of centerline, 22' AGL/810' MSL. Trees beginning 1190' from DER, from 948' left to 900' right of centerline, up to 100' AGL/923' MSL. **Rwy 27R,** tree 207' from DER, 502' right of centerline, 60' AGL/849' MSL. Tree 1541' from DER, 93' left of centerline, 60' AGL/850' MSL. Transmission tower 5542' from DER, 1922' right of centerline, 100' AGL/954' MSL. **Rwy 36,** terrain 98' from DER, 390' left of centerline, 803' MSL. Barricade 130' from DER, 418' left of centerline, 10' AGL/807' MSL. Trees beginning 340' from DER, 332' right of centerline, up to 36' AGL/815' MSL. Tree 2726' from DER, 443' left of centerline, 60' AGL/867' MSL.

SPRINGFIELD, OH

SPRINGFIELD-BECKLEY MUNI (SGH)
ORIG 08157 (FAA)

NOTE: **Rwy 6,** Trees beginning 642' from departure end of runway, 664' left of centerline, up to 96' AGL/1133' MSL. Tree 66' from departure end of runway, 514' right of centerline, 27' AGL/1064' MSL. **Rwy 15,** Multiple trees beginning 1357' from departure end of runway, 160' left of centerline, up to 86' AGL/1127' MSL. Tree 1763' from departure end of runway, 410' right of centerline, 51' AGL/1092' MSL. **Rwy 24,** Trees beginning 1387' from departure end of runway, 66' left of centerline, up to 58' AGL/1109' MSL. Windsock 1' from departure end of runway, 228' right of centerline, 20' AGL/1071' MSL. **Rwy 33,** Tree 183' from departure end of runway, 438' right of centerline, 24' AGL/1066' MSL.

STEUBENVILLE, OH

JEFFERSON COUNTY AIRPARK (2G2)
ORIG 00055 (FAA)

DEPARTURE PROCEDURE: **Rwy 14,** climb runway heading to 2200 before turning north.

SULLIVAN, IN

SULLIVAN COUNTY (SIV)
AMDT 1 99364 (FAA)

TAKE-OFF MINIMUMS: **Rwys 18, 36,** 200-1 or std. with a min. climb of 320' per NM to 1800.

DEPARTURE PROCEDURE: **Rwy 18,** climb runway heading to 1500 before turning west on course. **Rwys 18,36,** climb runway heading to 1800 before turning east on course.

TELL CITY, IN

PERRY COUNTY MUNI (TEL)
AMDT 1 95145 (FAA)

TAKE-OFF MINIMUMS: **Rwy 31,** 300-1.

TERRE HAUTE, IN

SKY KING (3I3)
AMDT 2 84075 (FAA)

TAKE-OFF MINIMUMS: **Rwys 8, 18,** 300-1.

DEPARTURE PROCEDURE: **Rwy 26,** climb to 1400 on runway heading before turning south. **Rwy 18,** climb to 1400 on runway heading before turning west.

TERRE HAUTE INTL-HULMAN FIELD (HUF)
ORIG 08213 (FAA)

NOTE: **Rwy 5,** Terrain beginning 118' from departure end of runway, left and right of centerline, 0' AGL/591' MSL. Floodlight 967' from departure end of runway, 673' right of centerline, 32' AGL/621' MSL. Trees beginning 2019' from departure end of runway, 317' left of centerline, up to 100' AGL/689' MSL. Tree 3340' from departure end of runway, 533' right of centerline, 79' AGL/668' MSL. **Rwy 14,** trees beginning 1266' from departure end of runway, 570' left of centerline, up to 100' AGL/689' MSL. Trees beginning 1,520' from departure end of runway 462' right of centerline, up to 100' AGL/689' MSL. Powerlines 3084' from departure end of runway, left and right of centerline, 98' AGL/682' MSL. **Rwy 18,** terrain beginning 84' from departure end of runway, left and right of centerline, 0' AGL/581' MSL . Trees beginning 3040' from departure end of runway, 192' left of centerline, up to 66' AGL/655' MSL. **Rwy 23**, trees beginning 412' from departure end of runway, 537' left of centerline, up to 34' AGL/593' MSL. Tree 1201' from departure end of runway, 376' right of centerline, 38' AGL/607' MSL. **Rwy 32,** trees and a pole beginning 397' from departure end of runway, 308' left of centerline, up to 82' AGL/651' MSL. Tree 1195' from departure end of runway 544' left of centerline, 68' AGL/637' MSL. Trees beginning 2597' from departure end of runway, 340' right of centerline, up to 100' AGL/669' MSL. **Rwy 36,** trees beginning 1580' from departure end of runway, 120' right of centerline, up to 100' AGL/669' MSL, trees beginning 2475' from departure end of runway, 153' left of centerline, up to 102' AGL/671' MSL.

TIFFIN, OH

SENECA COUNTY(16G)
AMDT 2 09183 (FAA)

NOTE: **Rwy 6,** multiple trees and buildings beginning 2' from DER, 186' right of centerline, up to 98' AGL/868' MSL. Antenna 129' from DER, 438' left of centerline, 66' AGL/836' MSL. Pole 408' from DER, 477' left of centerline, 39' AGL/809' MSL. Vehicle on road 501' from DER, 414' left of centerline, 26' AGL/796' MSL. Trees 2421' from DER, 207' left of centerline, 83' AGL/853' MSL. **Rwy 24,** multiple trees beginning 27' from DER, 280' left of centerline, up to 124' AGL/904' MSL. Building 1291' from DER, 528' left of centerline, 44' AGL/824' MSL. Multiple trees beginning 1071' from DER, 337' right of centerline, up to 92' AGL/872' MSL. Pole 1460' from DER, 562' right of centerline, 48' AGL/828' MSL.

TOLEDO, OH

METCALF FIELD (TDZ)
AMDT 2A 07326 (FAA)

TAKE-OFF MINIMUMS: **Rwys 14, 22, 32,** 300-1. **Rwy 4,** 2100-2 or std. with a min. climb of 300' per NM to 2100.

DEPARTURE PROCEDURE: **Rwys 14, 22, 32,** climb runway heading to 2000 before turning.

NOTE: **Rwy 14,** tree 789' from departure end of runway, 249' left of centerline, 61' AGL/685' MSL.

TOLEDO EXPRESS (TOL)
AMDT 2 89040 (FAA)

TAKE-OFF MINIMUMS: **Rwy 16,** 300-1 or std. with a min. climb of 260' per NM to 1000'.

DEPARTURE PROCEDURE: **Rwy 25,** climb runway heading to 1100' before turning.

UPPER SANDUSKY, OH

WYANDOT COUNTY (56D)
ORIG 80150 (FAA)

TAKE-OFF MINIMUMS: **Rwy 36,** 300-1.

VALPARAISO, IN

PORTER COUNTY MUNI (VPZ)
ORIG 08045 (FAA)

NOTE: **Rwy 9,** Tree 51' from departure end of runway, 350' right of centerline, 100' AGL/874' MSL. Tree 1219' from departure end of runway, 775' left of centerline, 57' AGL/807' MSL. **Rwy 18,** Tower and multiple trees beginning 140' from departure end of runway, 157' right of centerline, up to 100' AGL/865' MSL. Trees 143' from departure end of runway, 71' left of centerline, 100' AGL/865' MSL. **Rwy 27,** Multiple trees, 1038' from departure end of runway, 308' left of centerline, up to 68' AGL/828' MSL. Sign, 1847' from departure end of runway, 263' right of centerline, 49' AGL/817' MSL. **Rwy 36,** Trees 105' from departure end of runway, 99' right of centerline, 100' AGL/895' MSL Trees 108' from departure end of runway, 129' left of centerline, 100' AGL/874' MSL.

VAN WERT, OH

VAN WERT COUNTY (VNW)
AMDT 3 09015 (FAA)

TAKE-OFF MINIMUMS: **Rwy 9,** 300-1¼ or std. w/ min. climb of 306' per NM to 1100. **Rwys 18, 36,** NA-Environmental.

NOTE: **Rwy 9,** tower 6084' from departure end of runway, 1963' left of centerline, 170' AGL/955' MSL.

VERSAILLES, OH

DARKE COUNTY (VES)
AMDT 2 87015 (FAA)

TAKE-OFF MINIMUMS: **Rwys 9, 27,** 300-1.

CAUTION: 50' unlighted trees left side at departure end of runway 27.

WADSWORTH, OH

WADSWORTH MUNI (3G3)
AMDT 1 08101 (FAA)

TAKE-OFF MINIMUMS: **Rwy 2,** std. w/ min. climb of 412' per NM to 1700, or 600-2½ with minimum climb of 289' per NM to 1900, or 1100-2½ for climb in visual conditions. **Rwy 10,** std. w/ min. climb of 585' per NM to 1800, or 700-3 with minimum climb of 340' per NM to 1800, or 1100-2½ for climb in visual conditions. **Rwy 20,** 300-1¼ or std. w/ min. climb of 336' per NM to 1300. **Rwy 28,** 400-2½ or std. w/ min. climb of 457' per NM to 1500.

DEPARTURE PROCEDURE: **Rwy 2,** for climb in visual conditions: cross Wadsworth Muni airport at or above 1900 MSL before proceeding on course. **Rwy 10,** for climb in visual conditions: cross Wadsworth Muni airport at or above 1900 MSL before proceeding on course. **Rwy 28,** climb heading 277° to 1600 before proceeding on course.

NOTE: **Rwy 2,** vehicle on road 23' from departure end of runway, 404' right of centerline, 15' AGL/994' MSL. Powerline 1425' from departure end of runway, left and right of centerline, 40' AGL/1029' MSL. Trees beginning 2947' from departure end of runway, 80' left of centerline, up to 100' AGL/1129' MSL. Trees beginning 4490' from departure end of runway, 119' right of centerline, up to 100' AGL/1249' MSL. **Rwy 10,** trees beginning 2813' from departure end of runway, 245' right of centerline, up to 100' AGL/1289' MSL. Trees beginning 1659' from departure end of runway, 56' left of centerline, up to 100' AGL/1319' MSL. **Rwy 20,** vehicle on road 289' from departure end of runway, left and right of centerline, 15' AGL/994' MSL. Trees beginning 389' from departure end of runway, 194' left of centerline, up to 100' AGL/1079' MSL. Trees beginning 1921' from departure end of runway, 605' right of centerline, up to 100' AGL/1099' MSL. **Rwy 28,** building 249' from departure end of runway, 530' right of centerline, 24' AGL/989' MSL. Trees beginning 169' from departure end of runway, 198' left of centerline, up to 100' AGL/1079' MSL. Trees beginning 3698' from departure end of runway, 9' right of centerline, up to 100' AGL/1299' MSL.

WAPAKONETA, OH

NEIL ARMSTRONG (AXV)
AMDT 2 08213(FAA)

NOTE: **Rwy 8,** vehicle on road, 1' from departure end of runway, 403' right of centerline, 15' AGL/926' MSL. Fence 70' from departure end of runway, 222' right of centerline, 6' AGL/919' MSL. Fence 149' from departure end of runway, 270' left of centerline, 8' AGL/921' MSL. Obstruction light on pole, 348' from departure end of runway, 239' left of centerline, 15' AGL/928' MSL. Building, 614' from departure end of runway, 463' left of centerline, 15' AGL/929' MSL. Trees beginning 2385' from departure end of runway, 51' left of centerline, up to 101' AGL/1014' MSL. Trees beginning 2263' from departure end of runway, 268' right of centerline, up to 75' AGL/988' MSL. **Rwy 26,** obstruction light on DME, 401' from departure end of runway, 268' right of centerline, 9' AGL/922' MSL. Trees beginning 496' from departure end of runway, 51' right of centerline, up to 83' AGL/996' MSL. Trees beginning 563' from departure end of runway, 120' left of centerline, up to 72' AGL/985' MSL. Pole 620' from departure end of runway, 332' left of centerline, 25' AGL/938' MSL. Stack, 3021' from departure end of runway, 577' left of centerline, 125' AGL/1035' MSL. Tower, 3265' from departure end of runway, 729' right of centerline, 149' AGL/1050' MSL.

WARSAW, IN
WARSAW MUNI (ASW)
AMDT 1 83272 (FAA)
DEPARTURE PROCEDURE: **Rwy 36,** climb to 1200 on runway heading before turning west.

WASHINGTON, IN
DAVIESS COUNTY (DCY)
ORIG 84045 (FAA)
TAKE-OFF MINIMUMS: **Rwy 18,** 300-1.

WASHINGTON COURT HOUSE, OH
FAYETTE COUNTY (I23)
AMDT 2 07354 (FAA)
TAKE-OFF MINIMUMS: **Rwy 5,** 300-1¾ or std. w/ min. climb of 268' per NM to 1400.
NOTE: **Rwy 5,** train on railroad tracks 384' from departure end of runway, 243' right of centerline, 23' AGL/997' MSL. Terrain 81' from departure end of runway, 184' left of centerline, 0' AGL/978' MSL. Silo 8848' from departure end of runway, 772' right of centerline, 238' AGL/1213' MSL. **Rwy 23,** train on railroad tracks 509' from departure end of runway, 257' left of centerline, 23' AGL/1003' MSL.

WAUSEON, OH
FULTON COUNTY (USE)
AMDT 1 83048 (FAA)
TAKE-OFF MINIMUMS: **Rwys 9, 27,** 300-1.

WAVERLY, OH
PIKE COUNTY (EOP)
ORIG-A 07270 (FAA)
TAKE-OFF MINIMUMS: **Rwy 25,** 300-1.
NOTE: **Rwy 7,** building 507' from departure end of runway, 439' right of centerline, 30' AGL/688' MSL. **Rwy 25,** 60' AGL trees 500' from departure end of runway 170' left of centerline.

WEST UNION, OH
ALEXANDER SALAMON (AMT)
AMDT 1 90347 (FAA)
TAKE-OFF MINIMUMS: **Rwys 5, 23,** 300-1.
DEPARTURE PROCEDURE: **Rwys 5, 23,** climb straight ahead to 1700 before turning west.

WILLARD, OH
WILLARD (8G1)
AMDT 1 81134 (FAA)
TAKE-OFF MINIMUMS: **Rwys 10, 28,** 300-1.
DEPARTURE PROCEDURE: **Rwys 10, 28,** climb runway heading to 1500 before proceeding on course.

WILLOUGHBY, OH
WILLOUGHBY LOST NATION MUNI (LNN)
AMDT 2 06159 (FAA)
DEPARTURE PROCEDURE: **Rwy 10,** climb via heading 099° to 1600 before proceeding on course. **Rwy 23,** climb via heading 233° to 1400 before proceeding on course. **Rwy 28,** climb via heading 279° to 1400 before proceeding on course.
NOTE: **Rwy 5,** tree 1453' from departure end of runway, 725' right of centerline, 100' AGL/724' MSL. Building 509' from departure end of runway, 429' right of centerline, 20' AGL/644' MSL. **Rwy 10,** pole 663' from departure end of runway, 64' right of centerline, 52' AGL/675' MSL. **Rwy 23,** tree 634' from departure end of runway, 561' right of centerline, 100' AGL/724' MSL. Stacks 1.8 NM from departure end of runway, 1 NM right of centerline, 600' AGL/1207' MSL. **Rwy 28,** tree 1336' from departure end ofrunway, 699' left of centerline, 100' AGL/724' MSL, building 1101' from departure end of runway, 337' rightof centerline, 35' AGL/661' MSL, stacks 2.1 NM from departure end of runway, 4444' left of centerline, 600' AGL/1207' MSL.

WILMINGTON, OH
AIRBORNE AIRPARK (ILN)
ORIG 09239 (FAA)
NOTE: **Rwy 4L,** tree 1032' from DER, 644' right of centerline, 35' AGL/1114' MSL. **Rwy 22L,** tree 2437' from DER, 468' left of centerline, 100' AGL/1134' MSL.

CLINTON FIELD (I66)
AMDT 2 07186 (FAA)
TAKE-OFF MINIMUMS: **Rwy 3,** 300-1¼ or std. w/ a min. climb of 224' per NM to 1300', or alternatively, w/ std. takeoff minimums and a normal 200'/NM climb gradient, takeoff must occur no later than 1700' prior to departure end of runway.
NOTE: **Rwy 3,** multiple trees beginning 76' from departure end of runway, 76' right of centerline, up to 88' AGL/1137' MSL. Multiple trees beginning 279' from departure end of runway, 140' left of centerline, up to 96' AGL/1105' MSL. Water tank 1 NM from departure end of runway, 554' left of centerline, 176' AGL/1205' MSL. **Rwy 21,** multiple trees beginning 187' from departure end of runway, 509' right of centerline, up to 87' AGL/1111' MSL. Multiple trees beginning 243' from departure end of runway, 214' left of centerline, up to 77' AGL/1086' MSL.

WOODSFIELD, OH
MONROE COUNTY (4G5)
AMDT 2 91150 (FAA)
TAKE-OFF MINIMUMS: **Rwy 25,** 300-1.

WOOSTER, OH
WAYNE COUNTY (BJJ)
AMDT 1 98169 (FAA)
TAKE-OFF MINIMUMS: **Rwy 28,** 300-1.

WRIGHT-PATTERSON AFB (KFFO)

DAYTON, OH 09295

Rwy 5R, 200-1½*
Rwy 23R, 400-2¾**
Rwy 23L, 400-2¾***
* Or standard with minimum climb of 240ft/NM to 1100'.
** Or standard with minimum climb of 260ft/NM to 1300'.
*** Or standard with minimum climb of 210ft/NM to 1300'.
Rwy 5R, Climb on track 050° until reaching 1100.
TAKE-OFF OBSTACLES: **Rwy 23L:** 43' AGL VORTAC, 850' from DER, 662' right of centerline.
Rwy 5L: Up to 105' AGL tree line beginning 3000' from DER, 700' right of centerline to 5100' from DER, 1300' left of centerline.

YOUNGSTOWN, OH

LANSDOWNE (04G)
AMDT 2 95145 (FAA)

TAKE-OFF MINIMUMS: **Rwy 2,** 300-1. **Rwy 20,** 1500-2.
DEPARTURE PROCEDURE: **Rwy 2,** climb runway heading to 1500 then climbing right turn to 2500 via heading 090° before turning southbound. **Rwy 20,** climb visually over the airport to 2700 or until RADAR contact is established before proceeding south.

YOUNGSTOWN ELSER METRO (4G4)
ORIG-A 08157 (FAA)

TAKE-OFF MINIMUMS: **Rwy 10,** 300-2 or std. w/ min. climb of 237' per NM to 1500. **Rwys 18,28,** 300-1.
DEPARTURE PROCEDURE: **Rwy 36,** climb to 1500, then climbing right turn via heading 090° to 2600 before proceeding north. **Rwys 10, 28,** climb runway heading to 2600 before turning north.
NOTE: **Rwy 10,** Tower 8758' from departure end of runway, 1882' left of centerline, 138' AGL/1332' MSL.

YOUNGSTOWN-WARREN, OH

YOUNGSTOWN-WARREN RGNL (YNG)
AMDT 4 90207 (FAA)

TAKE-OFF MINIMUMS: **Rwy 23,** 300-1.

ZANESVILLE, OH

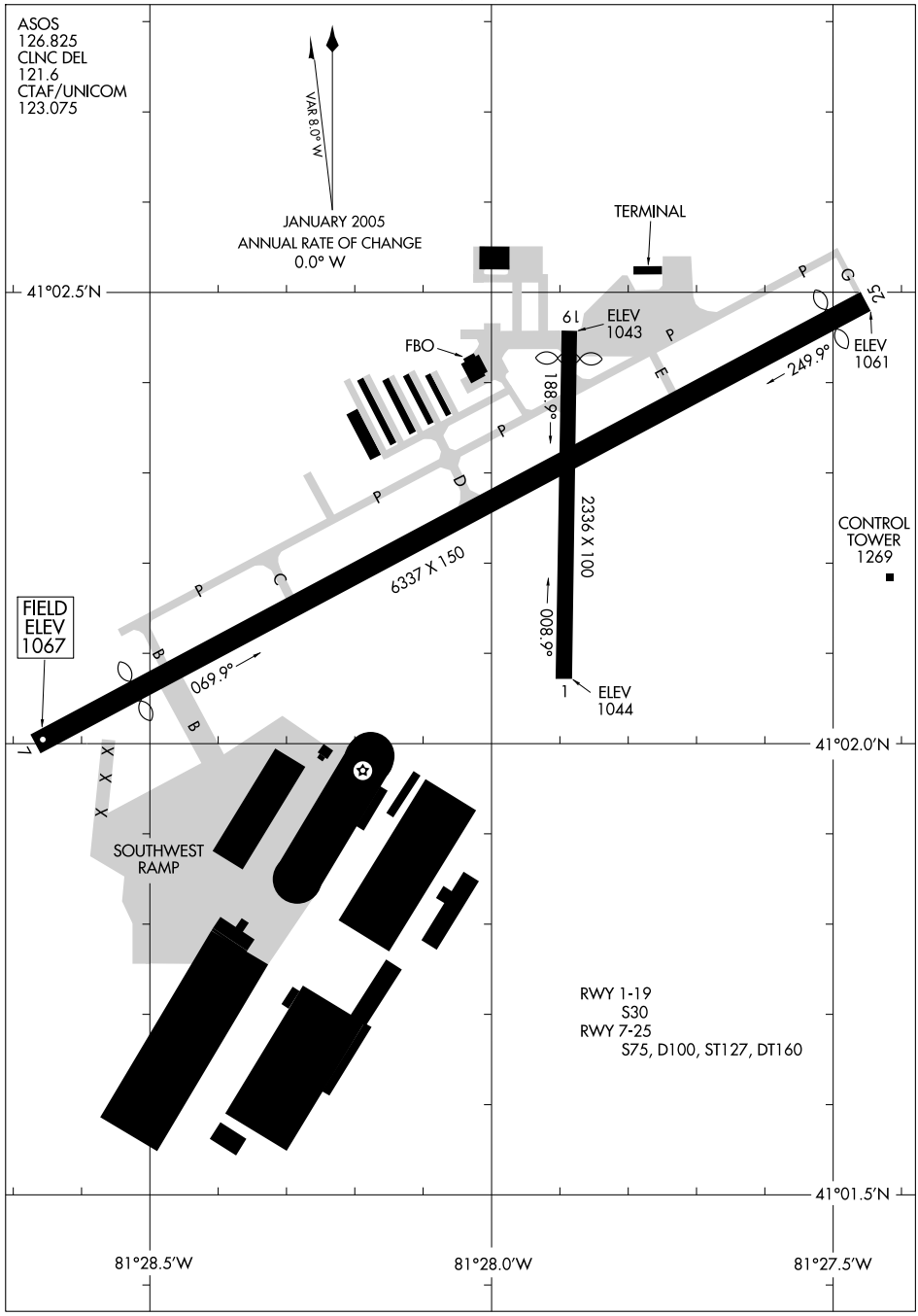
ZANESVILLE MUNI (ZZV)
ORIG 03359 (FAA)

NOTE: **Rwy 22,** tree 303' from departure end of runway, 427' left of centerline, 948' MSL. Tree 182' from departure end of runway, 350' right of centerline, 942' MSL. **Rwy 34,** tree 2370' from departure end of runway, 189' left of centerline, 968' MSL. Tree 2309' from departure end of runway, 388' left of centerline, 962' MSL.

AIRPORT DIAGRAM

AL-6 (FAA)

AKRON FULTON INTL (AKR)
AKRON,OHIO



LOC/DME I-AKR 110.9 Chan 46	APP CRS 249°	Rwy ldg 6075 TDZE 1048 Apt Elev 1068

LOC RWY 25
AKRON FULTON INTL (AKR)

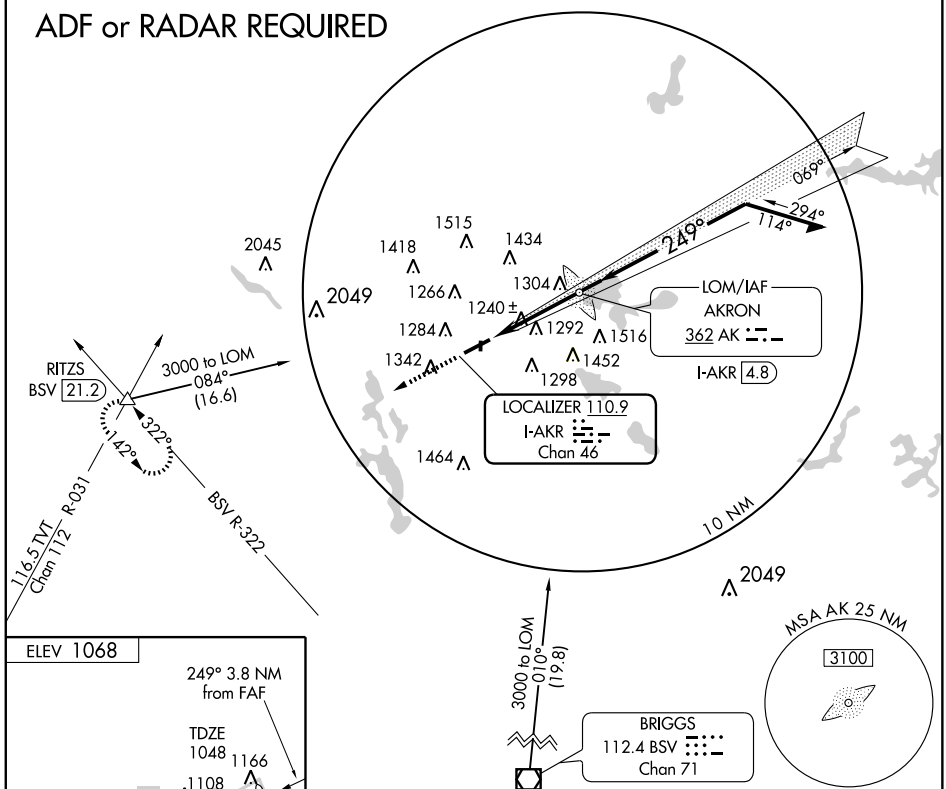
T
A NA

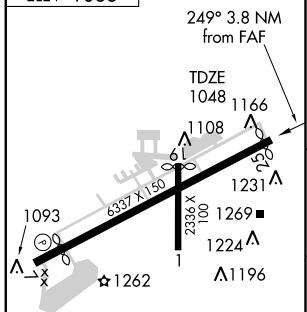
Use I-AKR DME when on LOC course.

MISSED APPROACH: Climb to 3000 via heading 249° and BSV R-322 to RITZS Int and hold.

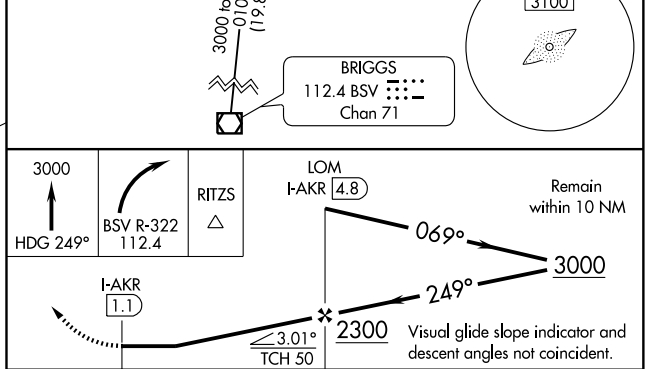
ASOS	AKRON-CANTON APP CON ★	CLNC DEL	UNICOM
126.825	118.6 371.875	121.6	123.075 (CTAF) L

ADF or RADAR REQUIRED





REIL Rwys 7 and 25 L
MIRL Rwy 1-19 L
HIRL Rwy 7-25 L



FAF to MAP 3.8 NM					
Knots	60	90	120	150	180
Min:Sec	3:48	2:32	1:54	1:31	1:16

CATEGORY	A	B	C	D
S-25	1540-1 492 (500-1)		1540-1¼ 492 (500-1¼)	1540-1½ 492 (500-1½)
CIRCLING	1640-1 572 (600-1)	1700-1 632 (700-1)	1700-1¾ 632 (700-1¾)	1700-2 632 (700-2)

EC-2, 14 JAN 2010 to 11 FEB 2010

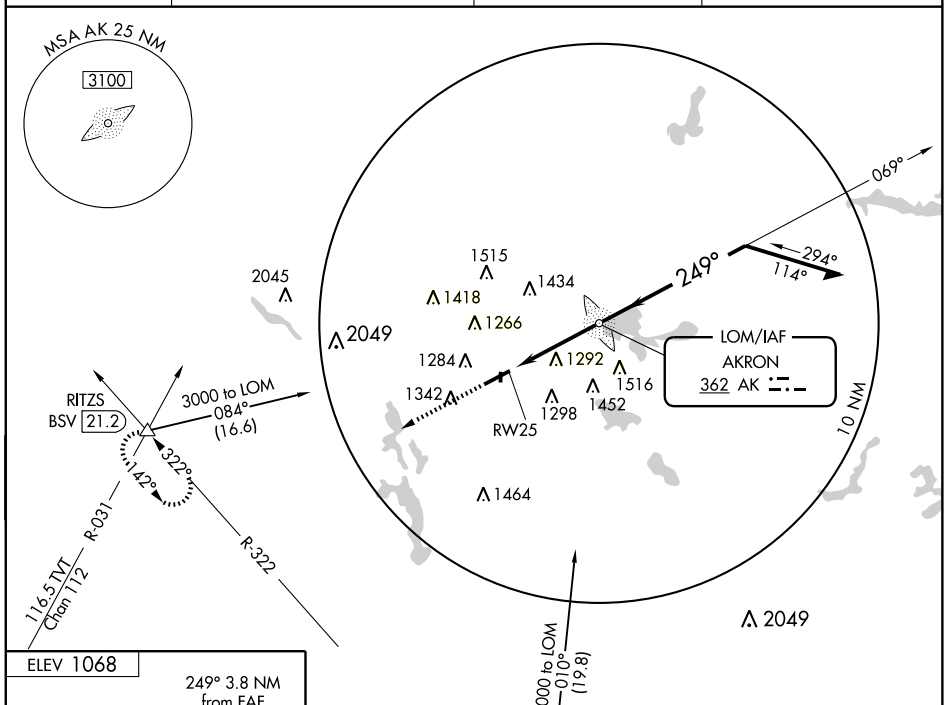
LOM AK	APP CRS	Rwy ldg	6075
362	249°	TDZE	1048
		Apt Elev	1068

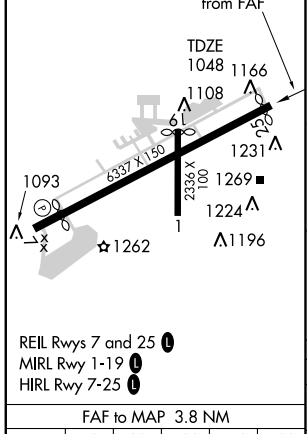
NDB or GPS RWY 25
AKRON FULTON INTL (AKR)

NA

MISSED APPROACH: Climb to 3000 via heading 249° and BSV R-322 to RITZS Int and hold.

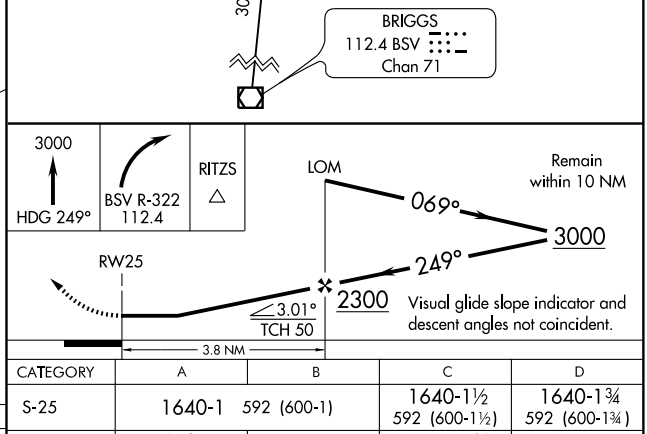
ASOS	AKRON-CANTON APP CON ★	CLNC DEL	UNICOM
126.825	118.6 371.875	121.6	123.075 (CTAF) L





REIL Rwys 7 and 25 L
MIRL Rwy 1-19 L
HIRL Rwy 7-25 L

FAF to MAP 3.8 NM					
Knots	60	90	120	150	180
Min:Sec	3:48	2:32	1:54	1:31	1:16



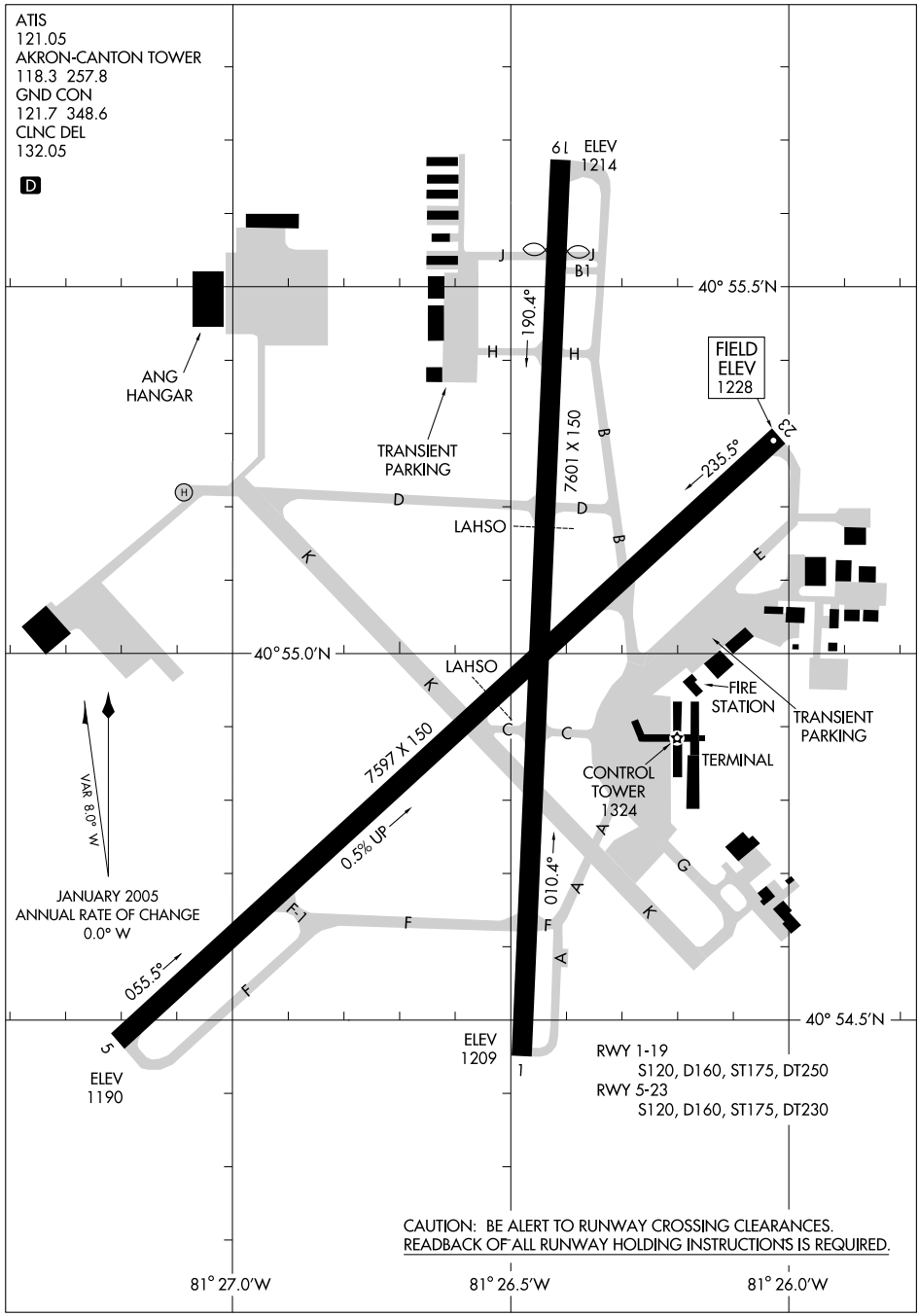
CATEGORY	A	B	C	D
S-25	1640-1 592 (600-1)		1640-1½ 592 (600-1½)	1640-1¾ 592 (600-1¾)
CIRCLING	1640-1 572 (600-1)	1700-1 632 (700-1)	1700-1¾ 632 (700-1¾)	1700-2 632 (700-2)

EC-2, 14 JAN 2010 to 11 FEB 2010

AIRPORT DIAGRAM

AL-638 (FAA)

AKRON-CANTON RGNL (CAK)
AKRON, OHIO



EC-2, 14 JAN 2010 to 11 FEB 2010

LOC I-CAK	APP CRS	Rwy ldg	7000
109.5	009°	TDZE	1209
		Apt Elev	1228

ILS or LOC RWY 1
AKRON-CANTON RGNL (CAK)

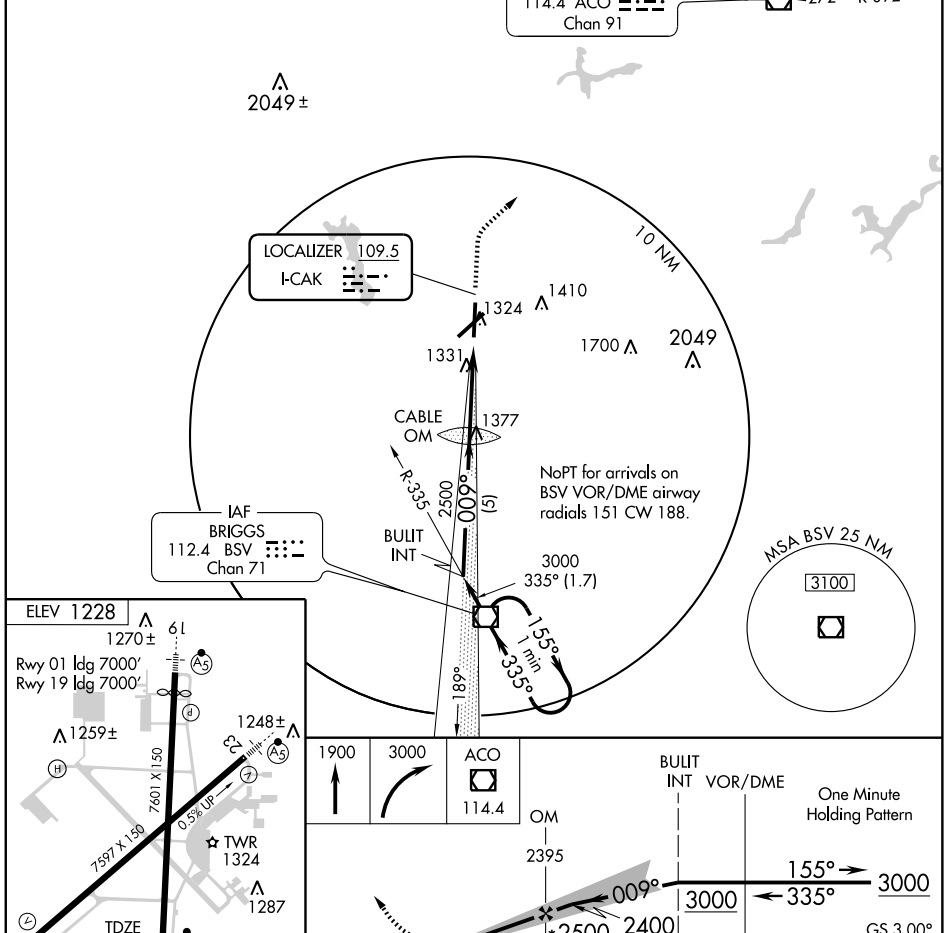
ASR

**RVR 1800 authorized with the use of FD or AP or HUD to DA.

MALSR

MISSED APPROACH: Climb to 1900, then climbing right turn to 3000 direct ACO VOR/DME and hold.

ATIS	AKRON-CANTON APP CON ★	AKRON-CANTON TOWER	GND CON	CLNC DEL
121.05	EAST 125.5 371.875 WEST 118.6 323.0	118.3 257.8	121.7 348.6	132.05



FAF to MAP 3.5 NM					
Knots	60	90	120	150	180
Min:Sec	3:30	2:20	1:45	1:24	1:10

CATEGORY	A	B	C	D
S-ILS 1	**1409/24 200 (200-½)			
S-LOC 1	1600/24 391 (400-½)			1600/40 391 (400-¾)
CIRCLING	1760-1 532 (600-1)		1760-1½ 532 (600-1½)	1780-2 552 (600-2)

EC-2, 14 JAN 2010 to 11 FEB 2010

LOC I-RGO	APP CRS	Rwy ldg	7000
109.5	189°	TDZE	1218
		Apt Elev	1228

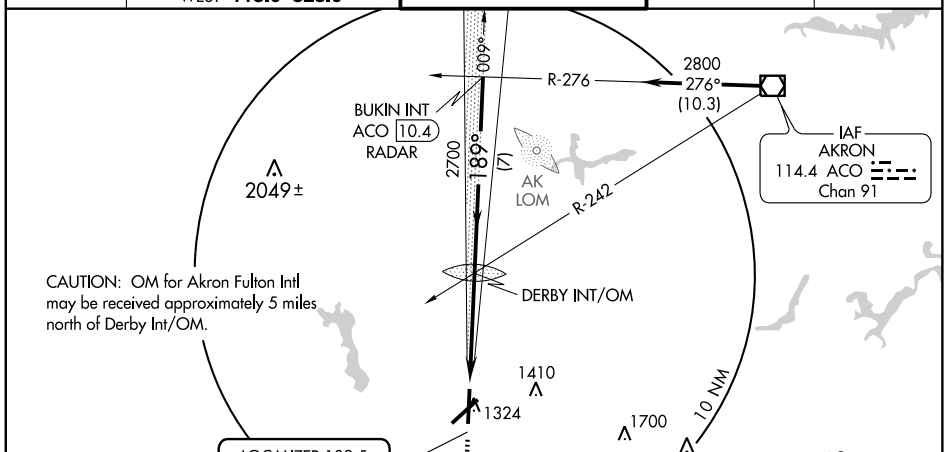
ILS or LOC RWY 19
AKRON-CANTON RGNL (CAK)

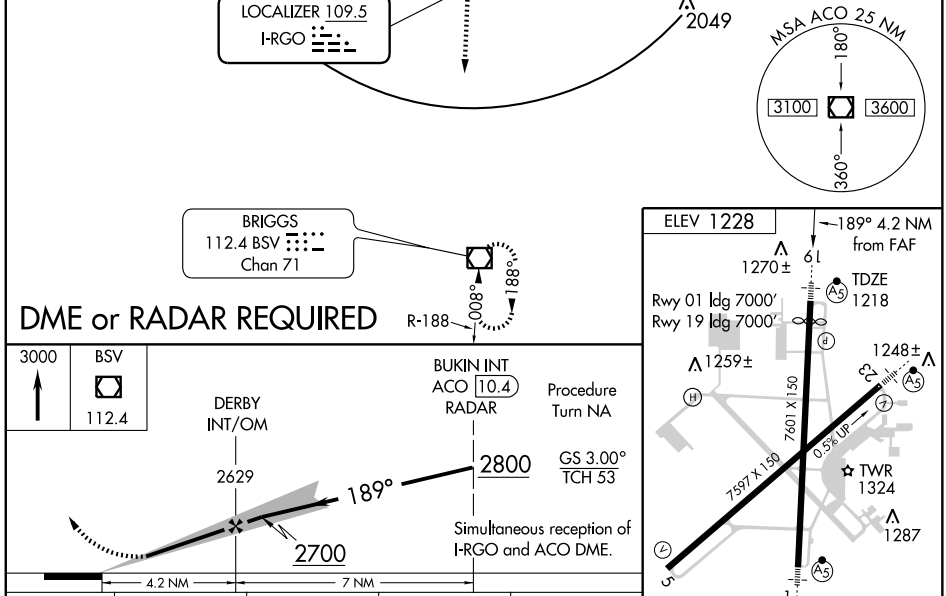
ASR: If local altimeter setting not received, use Akron Fulton Intl altimeter setting and increase all DH/MDAs 40 feet.
*RVR 1800 authorized with the use of FD or AP or HUD to DA.

MALSR

MISSED APPROACH: Climb to 3000 direct BSV VOR/DME and hold.

ATIS	AKRON-CANTON APP CON *	AKRON-CANTON TOWER	GND CON	CLNC DEL
121.05	EAST 125.5 371.875 WEST 118.6 323.0	118.3 257.8	121.7 348.6	132.05





CATEGORY	A	B	C	D
S-ILS 19	*1418/24 200 (200-½)			
S-LOC 19	1560/24 342 (400-½)			1560/40 342 (400-¾)
CIRCLING	1760-1 532 (600-1)		1760-1½ 532 (600-1½)	1780-2 552 (600-2)

FAF to MAP 4.2 NM					
Knots	60	90	120	150	180
Min:Sec	4:12	2:48	2:06	1:41	1:24

EC-2. 14 JAN 2010 to 11 FEB 2010

LOC I-GGZ	APP CRS	Rwy ldg	7597
108.3	234°	TDZE	1228
		Apt Elev	1228

ILS or LOC RWY 23

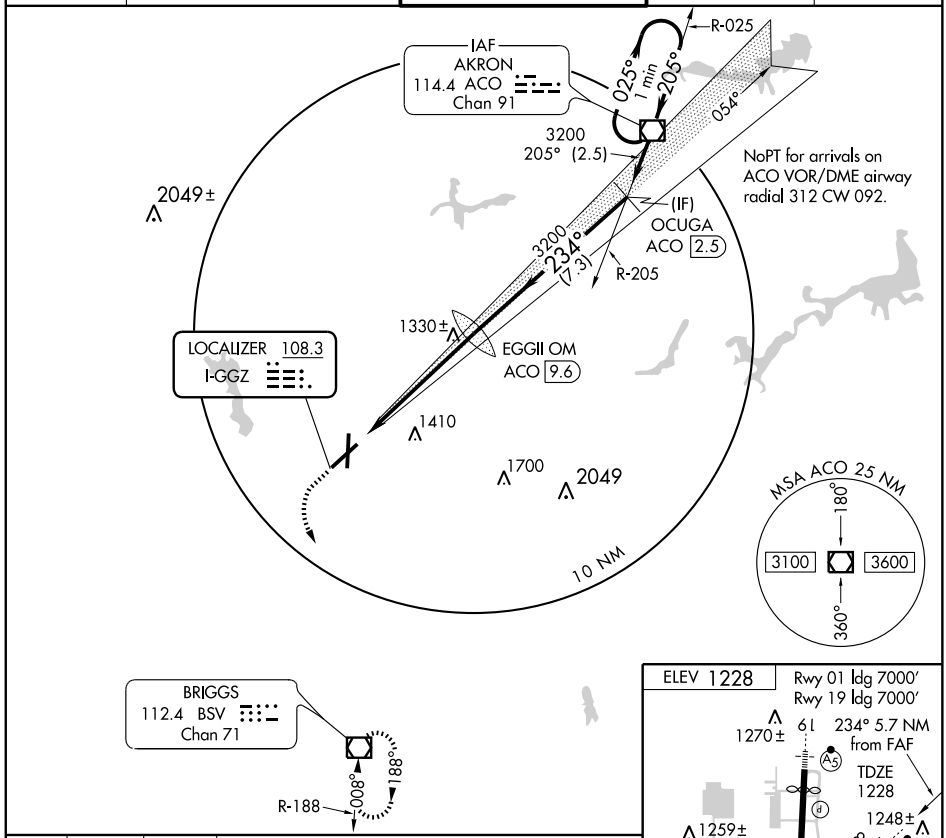
AKRON-CANTON RGNL (CAK)

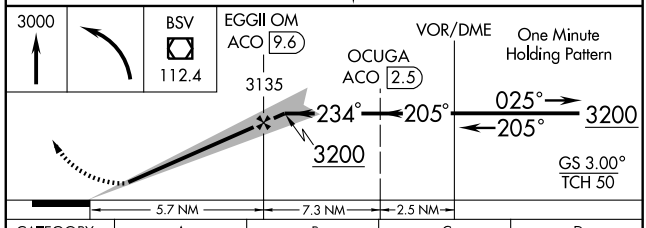
ASR — Autopilot coupled approach NA below 1574 feet.

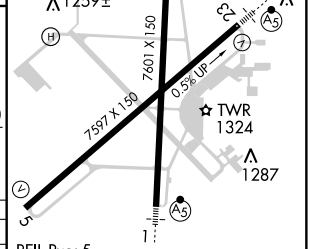
MALSR

MISSED APPROACH: Climb to 3000 then left turn direct BSV VOR/DME and hold.

ATIS	AKRON-CANTON APP CON ★	AKRON-CANTON TOWER	GND CON	CLNC DEL
121.05	EAST 125.5 371.875 WEST 118.6 323.0	118.3 257.8	121.7 348.6	132.05







CATEGORY	A	B	C	D
S-ILS 23	1428/24 200 (200-½)			
S-LOC 23	1580/24 352 (400-½)			1580/40 352 (400-¾)
CIRCLING	1760-1 532 (600-1)		1760-1½ 532 (600-1½)	1780-2 552 (600-2)

FAF to MAP 5.7 NM

Knots	60	90	120	150	180
Min:Sec	5:42	3:48	2:51	2:17	1:54

EC-2. 14 JAN 2010 to 11 FEB 2010

VOR/DME ACO	APP CRS	Rwy ldg	7597
114.4	048°	TDZE	1202
Chan 91		Apt Elev	1228

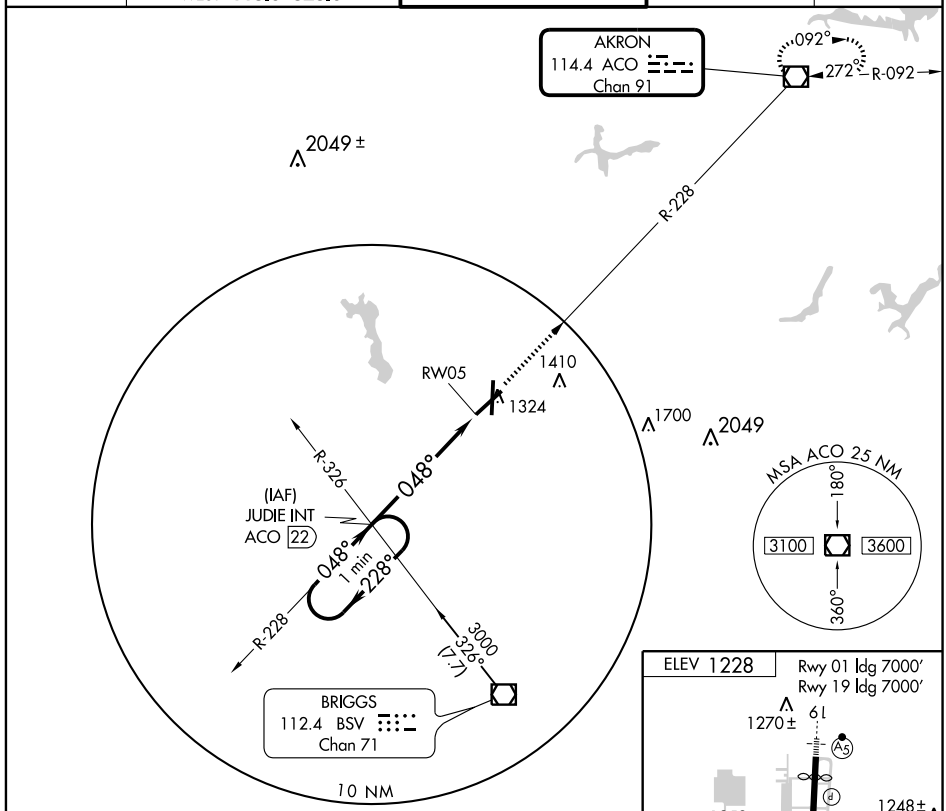
VOR or GPS RWY 5

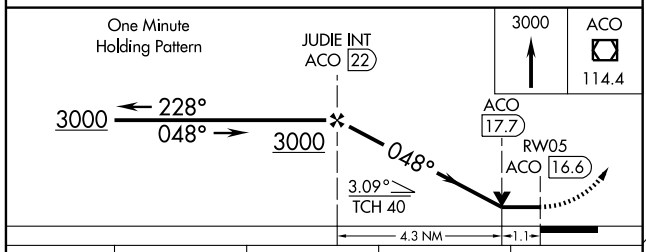
AKRON-CANTON RGNL (CAK)

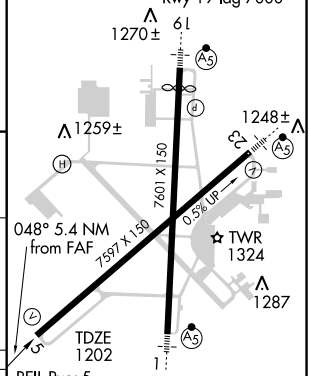
ASR

MISSED APPROACH: Climb to 3000 direct ACO VOR/DME and hold.

ATIS	AKRON-CANTON APP CON ★	AKRON-CANTON TOWER	GND CON	CLNC DEL
121.05	EAST 125.5 371.875 WEST 118.6 323.0	118.3 257.8	121.7 348.6	132.05







CATEGORY	A	B	C	D
S-5	1600-1 398 (400-1)		1600-1¼ 398 (400-1¼)	1600-1½ 398 (400-1½)
CIRCLING	1680-1 452 (500-1)		1680-1½ 452 (500-1½)	1780-2 552 (600-2)

FAF to MAP 5.4 NM					
Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48

EC-2, 14 JAN 2010 to 11 FEB 2010

VOR/DME ACO	APP CRS	Rwy ldg	7597
114.4	227°	TDZE	1228
Chan 91		Apt Elev	1228

VOR or GPS RWY 23

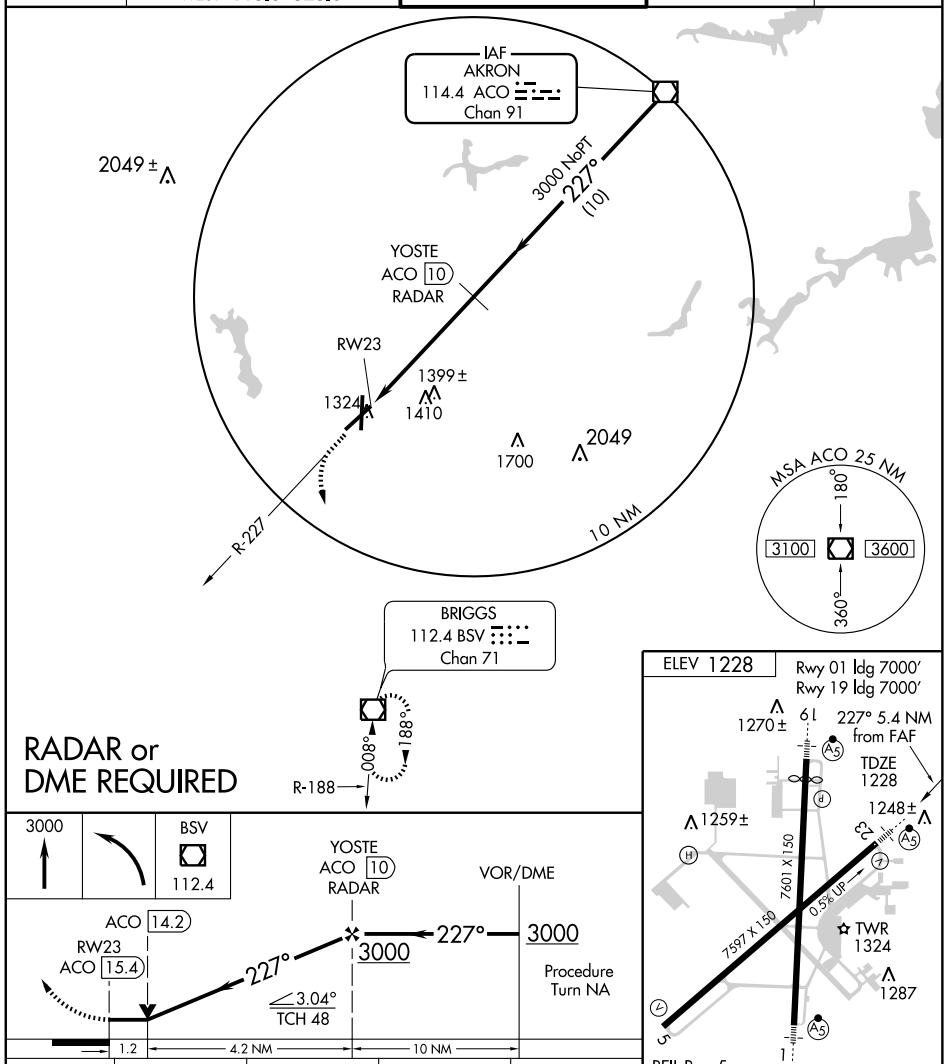
AKRON-CANTON RGNL (CAK)

ASR

MALSR

MISSED APPROACH: Climb to 3000 then left turn direct BSV VOR/DME and hold.

ATIS	AKRON-CANTON APP CON ★	AKRON-CANTON TOWER	GND CON	CLNC DEL
121.05	EAST 125.5 371.875 WEST 118.6 323.0	118.3 257.8	121.7 348.6	132.05



CATEGORY	A	B	C	D
S-23	1660/24 432 (500-½)		1660/40 432 (500-¾)	1660/50 432 (500-1)
CIRCLING	1680-1 452 (500-1)		1680-1½ 452 (500-1½)	1780-2 552 (600-2)

FAF to MAP 5.4 NM

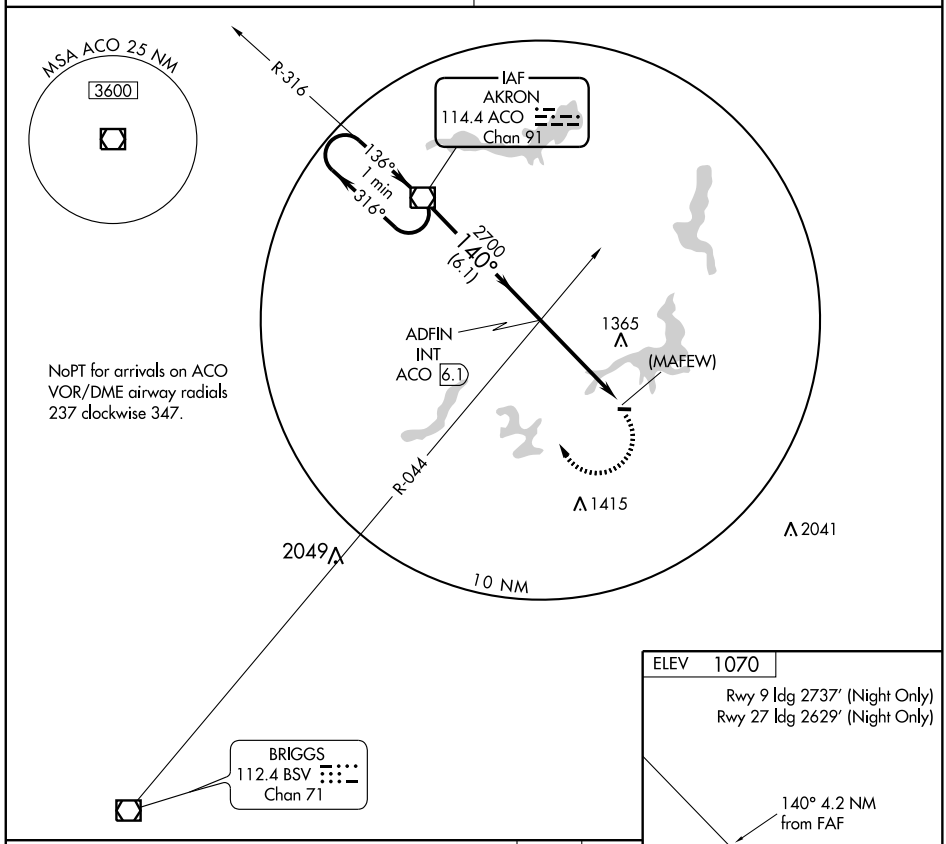
Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48

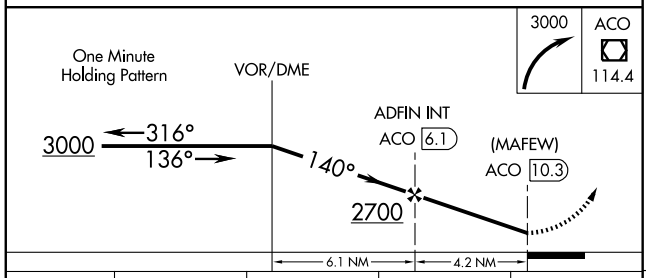
VOR/DME ACO 114.4 Chan 91	APP CRS 140°	Rwy ldg N/A TDZE N/A Apt Elev 1070

VOR or GPS-A

ALLIANCE/MILLER (4G3)

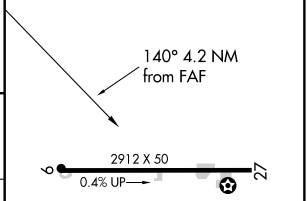
▲ NA Use Akron-Canton altimeter setting. Procedure not authorized at night.	MISSED APPROACH: Climbing right turn to 3000 direct ACO VOR/DME and hold.
AKRON-CANTON APP CON★ **125.5 226.4**	UNICOM **122.8** (CTAF) Ⓛ





ELEV 1070

Rwy 9 ldg 2737′ (Night Only)
Rwy 27 ldg 2629′ (Night Only)



REIL Rwys 9 and 27 Ⓛ
LIRL Rwy 9-27 Ⓛ

CATEGORY	A	B	C	D
CIRCLING	1680-1 610 (700-1)		1680-1¾ 610 (700-1¾)	NA

FAF to MAP 4.2 NM

Knots	60	90	120	150	180
Min:Sec	4:12	2:48	2:06	1:41	1:24

EC-2, 14 JAN 2010 to 11 FEB 2010

NDB AAU 329	APP CRS 189°	Rwy ldg 3502 TDZE 1206 Apt Elev 1206

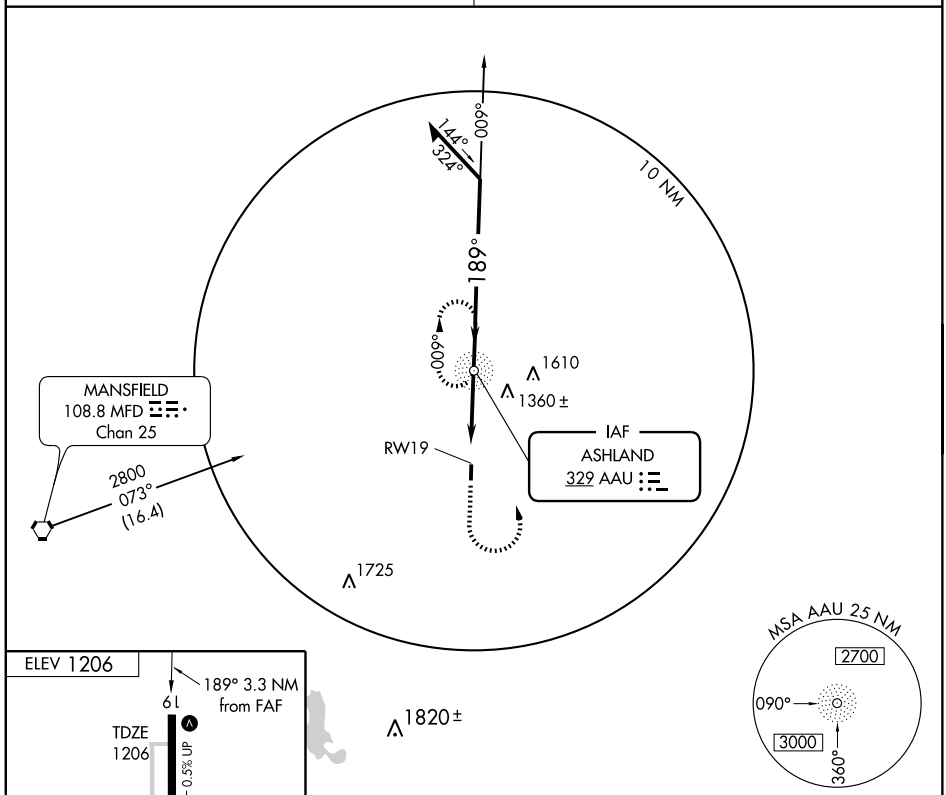
NDB or GPS RWY 19
ASHLAND COUNTY (3G4)

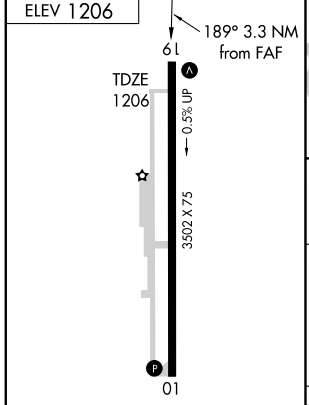
T
A NA

If local altimeter setting not received, use Mansfield altimeter setting and increase all MDA's 60 feet.

MISSED APPROACH: Climb to 2800, then left turn direct AAU NDB and hold.

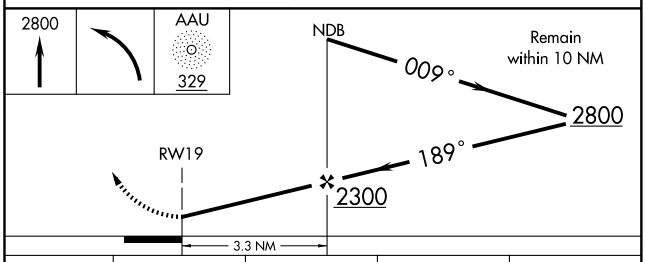
MANSFIELD APP CON ★	UNICOM
124.2 390.8	122.7 (CTAF) L





REIL Rwys 01 and 19 L
MIRL Rwy 01/19 L

FAF to MAP 3.3 NM					
Knots	60	90	120	150	180
Min:Sec	3:18	2:12	1:39	1:19	1:06



CATEGORY	A	B	C	D
S-19	1640-1 434 (500-1)		1640-1¼ 434 (500-1¼)	NA
CIRCLING	1640-1 434 (500-1)	1660-1 454 (500-1)	1660-1½ 454 (500-1½)	NA

EC-2, 14 JAN 2010 to 11 FEB 2010

VORTAC MFD	APP CRS	Rwy ldg / TDZE / Apt Elev
108.8 Chan 25	085°	N/A / N/A / 1206

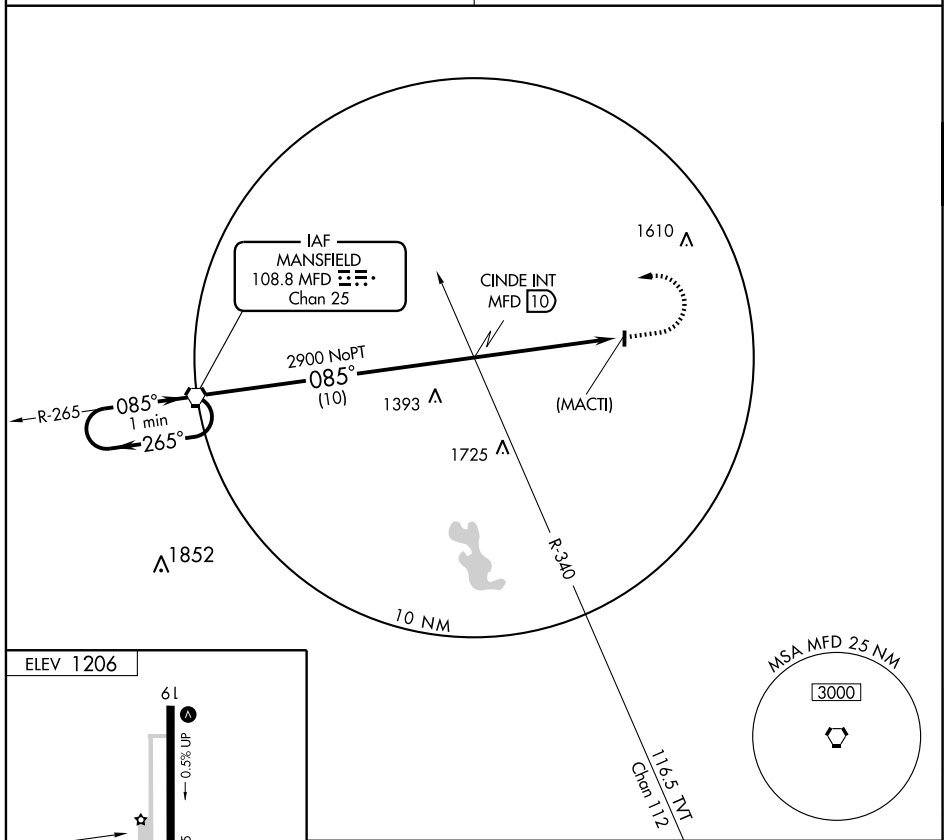
VOR or GPS-A
ASHLAND COUNTY (3G4)

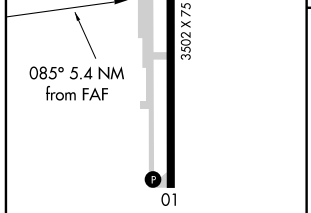
NA

If local altimeter setting not received, use Mansfield altimeter setting and increase all MDA's 60 feet.

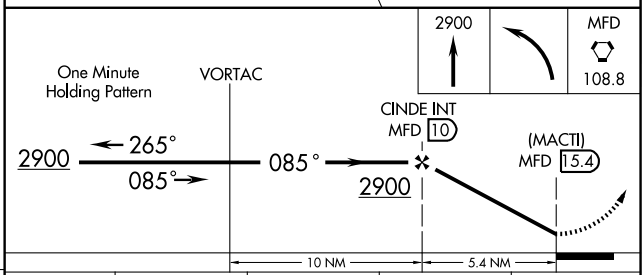
MISSED APPROACH: Climb to 2900 then left turn direct MFD VORTAC and hold.

MANSFIELD APP CON ★	UNICOM
124.2 390.8	122.7 (CTAF) L





REIL Rwys 01 and 19 L
MIRL Rwy 01/19 L



FAF to MAP 5.4 NM					
Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48

CATEGORY	A	B	C	D
CIRCLING	1620-1 414 (500-1)	1660-1 454 (500-1)	1660-1½ 454 (500-1½)	NA

EC-2, 14 JAN 2010 to 11 FEB 2010

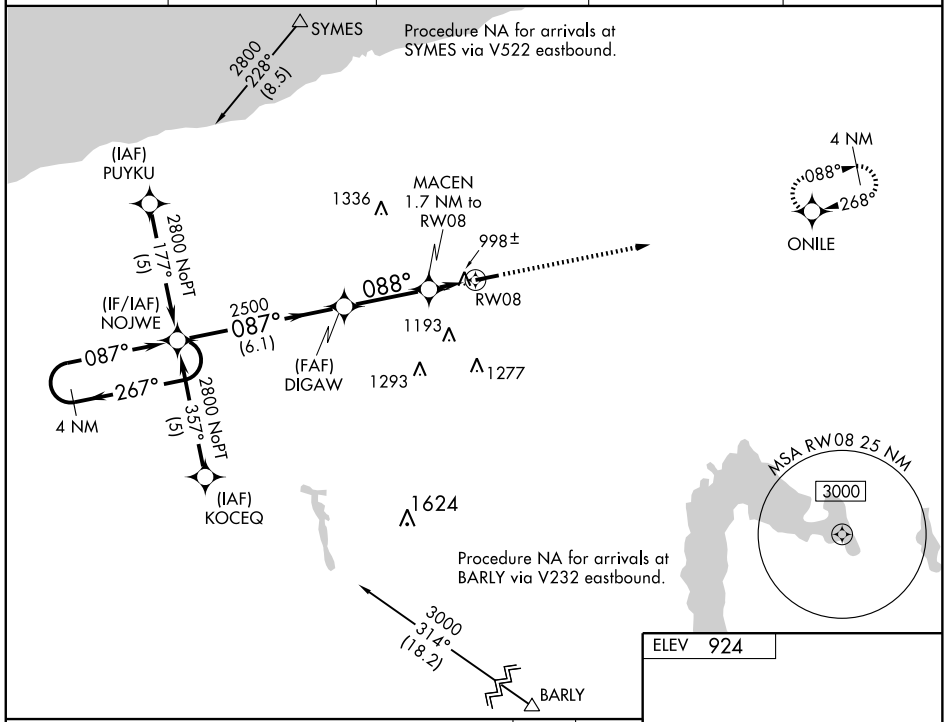
WAAS CH 58013 W08A	APP CRS 088°	Rwy ldg 5197 TDZE 919 Apt Elev 924

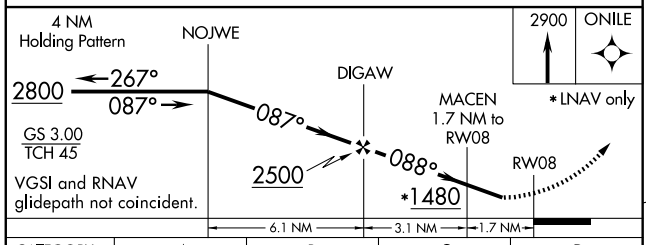
RNAV (GPS) RWY 8
ASHTABULA COUNTY (HZY)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Erie altimeter setting and increase all DA 95 feet and all MDA 100 feet. Increase LPV and LNAV/VNAV visibility ¼ mile all Cats, LNAV Cat C/D visibility ¼ mile. VDP and Baro-VNAV NA when using Erie altimeter setting.

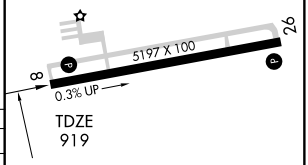
MISSED APPROACH: Climb to 2900 direct ONILE and hold.

ASOS	ERIE APP CON *	CLNC DEL (GCO)	UNICOM	
118.325	121.0	121.725	122.8 (CTAF)	123.3 L





ELEV 924



088° to RW08 1029±

CATEGORY	A	B	C	D
LPV DA	1250-1¼ 331 (400- 1¼)			
LNAV/VNAV DA	1268-1¼ 349 (400- 1¼)			
LNAV MDA	1280-1 361 (400-1)			1280-1¼ 361 (400-1¼)
CIRCLING	1360-1 436 (500-1)	1380-1 456 (500-1)	1380-1½ 456 (500-1½)	1480-2 556 (600-2)

REIL Rwys 8 and 26 L
MIRL Rwy 8-26 L

EC-2. 14 JAN 2010 to 11 FEB 2010

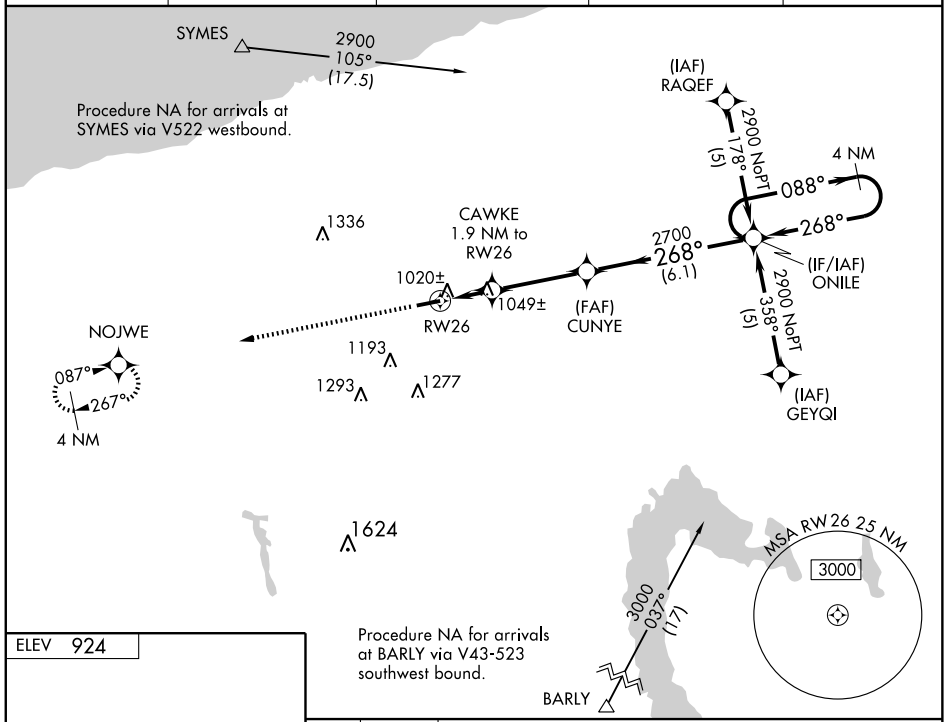
WAAS CH 72713 W26A	APP CRS 268°	Rwy ldg 5197 TDZE 924 Apt Elev 924

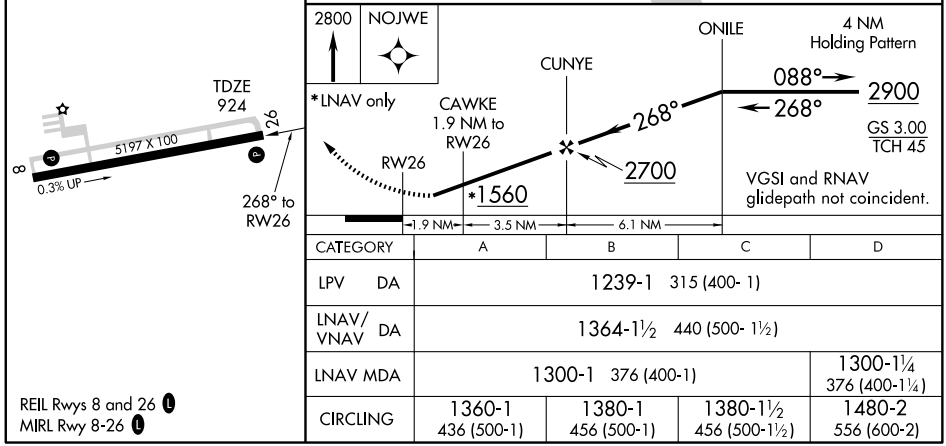
RNAV (GPS) RWY 26
ASHTABULA COUNTY (HZY)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Erie altimeter setting and increase all DA 95 feet and all MDA 100 feet. Increase LPV and LNAV/VNAV visibility ½ mile all Cats, LNAV Cat C/D visibility ¼ mile. VDP and Baro-VNAV NA when using Erie altimeter setting.

MISSED APPROACH: Climb to 2800 direct NOJWE and hold.

ASOS	ERIE APP CON ★	CLNC DEL (GCO)	UNICOM	
118.325	121.0	121.725	122.8 (CTAF)	123.3 L





CATEGORY	A	B	C	D
LPV DA	1239-1 315 (400- 1)			
LNAV/VNAV DA	1364-1½ 440 (500- 1½)			
LNAV MDA	1300-1 376 (400-1)			1300-1¼ 376 (400-1¼)
CIRCLING	1360-1 436 (500-1)	1380-1 456 (500-1)	1380-1½ 456 (500-1½)	1480-2 556 (600-2)

REIL Rwys 8 and 26 L
MIRL Rwy 8-26 L

EC-2, 14 JAN 2010 to 11 FEB 2010

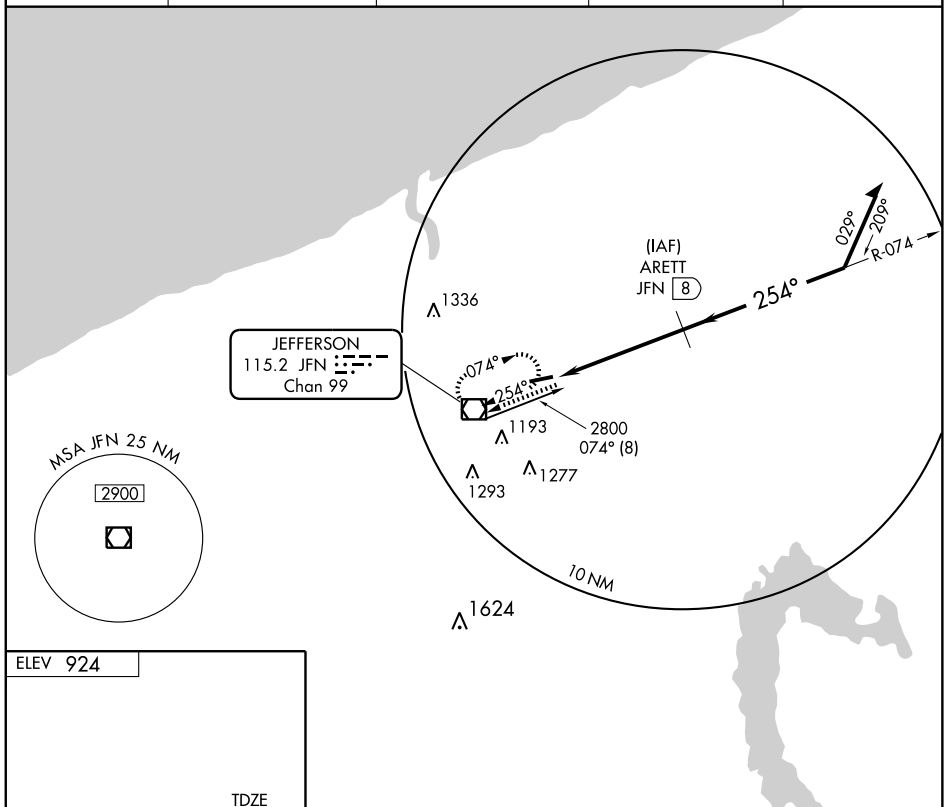
VOR/DME JFN 115.2 Chan 99	APP CRS 254°	Rwy ldg 5197 TDZE 924 Apt Elev 924

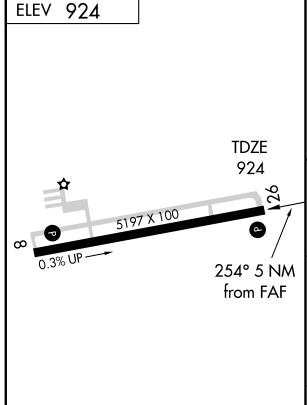
VOR/DME RWY 26
ASHTABULA COUNTY (HZY)

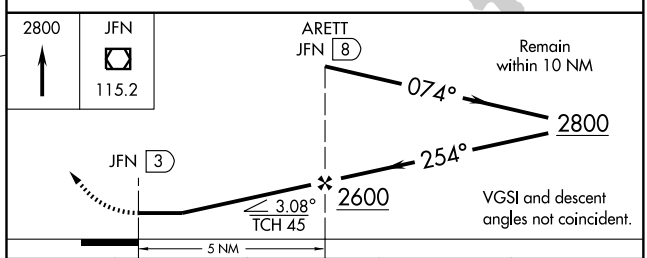
NA

MISSED APPROACH: Climb to 2800 direct JFN VOR/DME and hold.

ASOS	ERIE APP CON ★	CLNC DEL (GCO)	UNICOM	
118.325	121.0	121.725	122.8 (CTAF)	123.3 L







CATEGORY	A	B	C	D
S-26	1320-1 396 (400-1)			1320-1¼ 396 (400-1¼)
CIRCLING	1360-1 436 (500-1)	1380-1 456 (500-1)	1380-1½ 456 (500-1½)	1480-2 556 (600-2)

REIL Rwys 8 and 26 L
MIRL Rwy 8-26 L

EC-2, 14 JAN 2010 to 11 FEB 2010

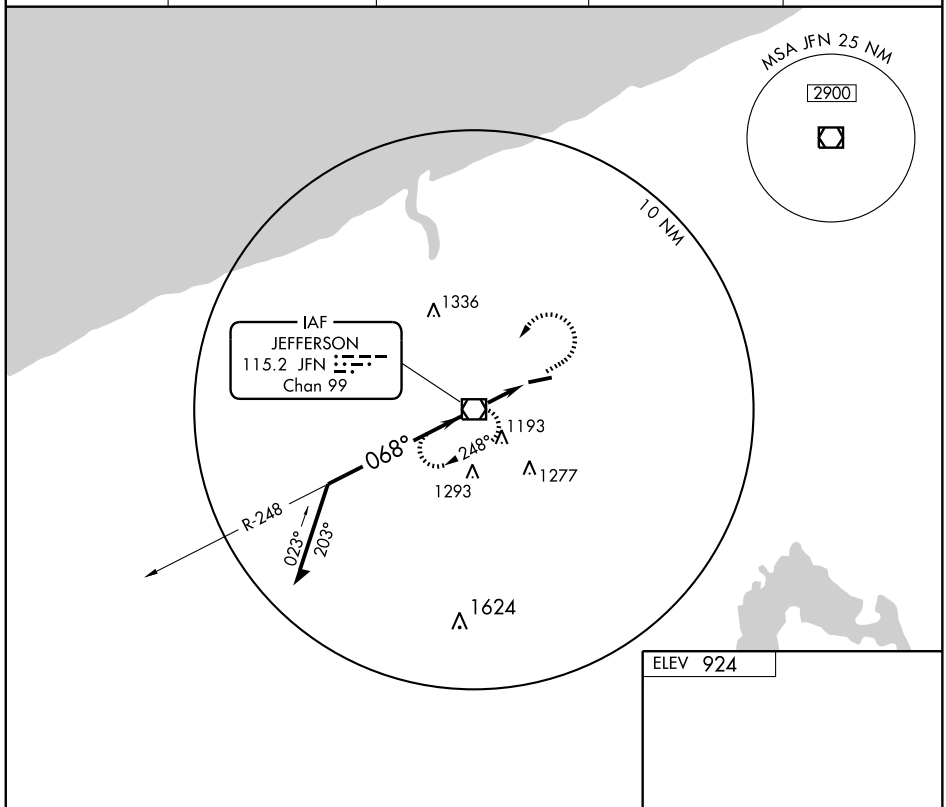
VOR/DME JFN	APP CRS	Rwy ldg	5197
115.2	068°	TDZE	919
Chan 99		Apt Elev	924

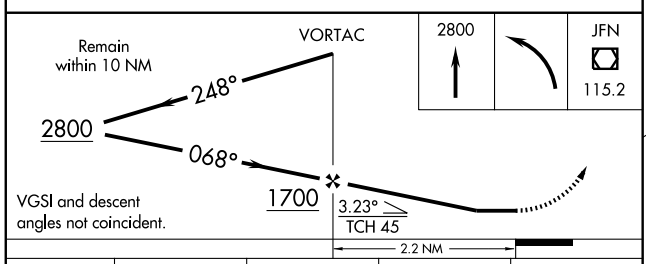
VOR RWY 8
ASHTABULA COUNTY (HZY)

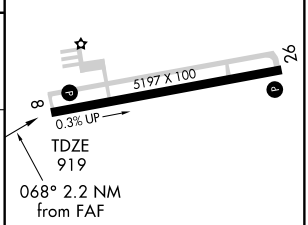
NA

MISSED APPROACH: Climb to 2800 then left turn direct JFN VOR/DME and hold.

ASOS	ERIE APP CON ★	CLNC DEL (GCO)	UNICOM	
118.325	121.0	121.725	122.8 (CTAF)	123.3 L







REIL Rwys 8 and 26 L
MIRL Rwy 8-26 L

CATEGORY	A	B	C	D
S-8	1300-1 381 (400-1)			1300-1¼ 381 (400-1¼)
CIRCLING	1360-1 436 (500-1)	1380-1 456 (500-1)	1380-1½ 456 (500-1½)	1480-2 556 (600-2)

FAF to MAP 2.2 NM					
Knots	60	90	120	150	180
Min:Sec	2:12	1:28	1:06	0:53	0:44

LOC I-UNI	APP CRS	Rwy ldg	5600
108.75	247°	TDZE	765
		Apt Elev	766

ILS or LOC RWY 25

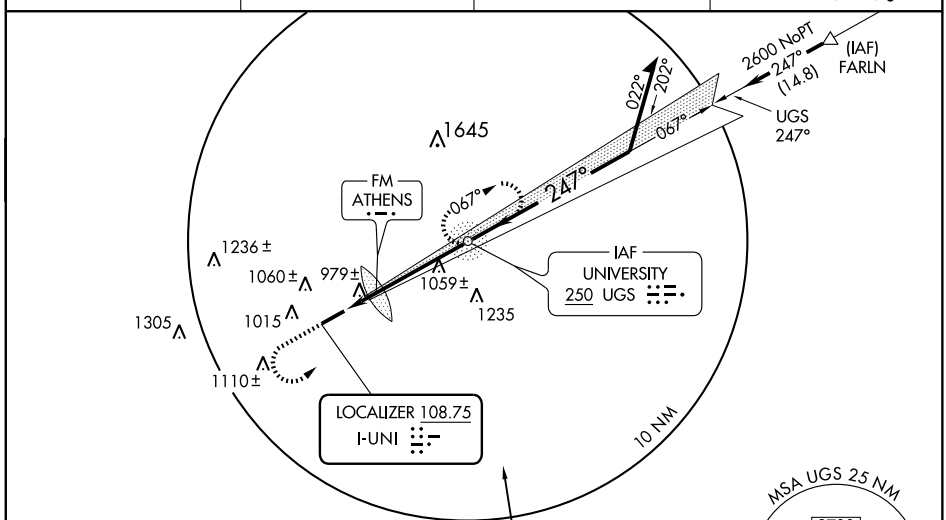
ATHENS (ALBANY)/ OHIO UNIVERSITY SNYDER FIELD (UNI)

NA

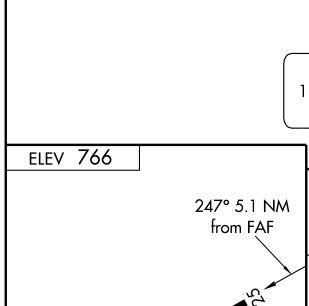
ADF REQUIRED
If local altimeter setting not received, use Parkersburg, WV altimeter setting and increase all DH's and MDA's 100 feet.

MISSED APPROACH: Climb to 3000, then left turn direct UGS NDB and hold.

AWOS-3	HUNTINGTON APP CON	CLNC DEL	UNICOM
128.325	120.95 270.1	120.95	123.075 (CTAF) L

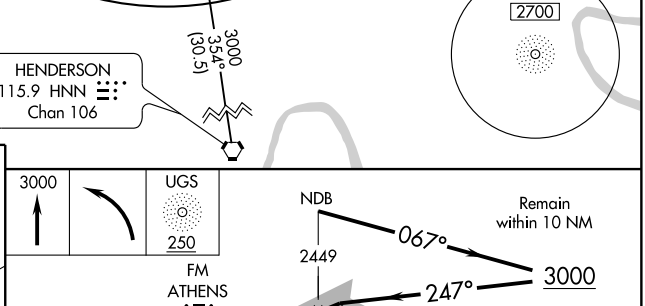


ELEV 766



MIRL Rwy 7-25 L
REIL Rwys 7 and 25 L

FAF to MAP 4.6 NM					
Knots	60	90	120	150	180
Min:Sec	4:36	3:04	2:18	1:50	1:32



CATEGORY	A	B	C	D
S-ILS 25	974-1 209 (300-1)			
S-LOC 25	1320-1 555 (600-1)		1320-1½ 555 (600-1½)	1320-1¾ 555 (600-1¾)
CIRCLING	1380-1 614 (700-1)	1420-1 654 (700-1)	1420-1¾ 654 (700-1¾)	1420-2 654 (700-2)
FM MINIMUMS				
S-LOC 25	1240-1 475 (500-1)		1240-1¼ 475 (500-1¼)	1240-1½ 475 (500-1½)
CIRCLING	1380-1 614 (700-1)	1420-1 654 (700-1)	1420-1¾ 654 (700-1¾)	1420-2 654 (700-2)

NDB UGS	APP CRS	Rwy ldg	5600
250	247°	TDZE	765
		Apt Elev	766

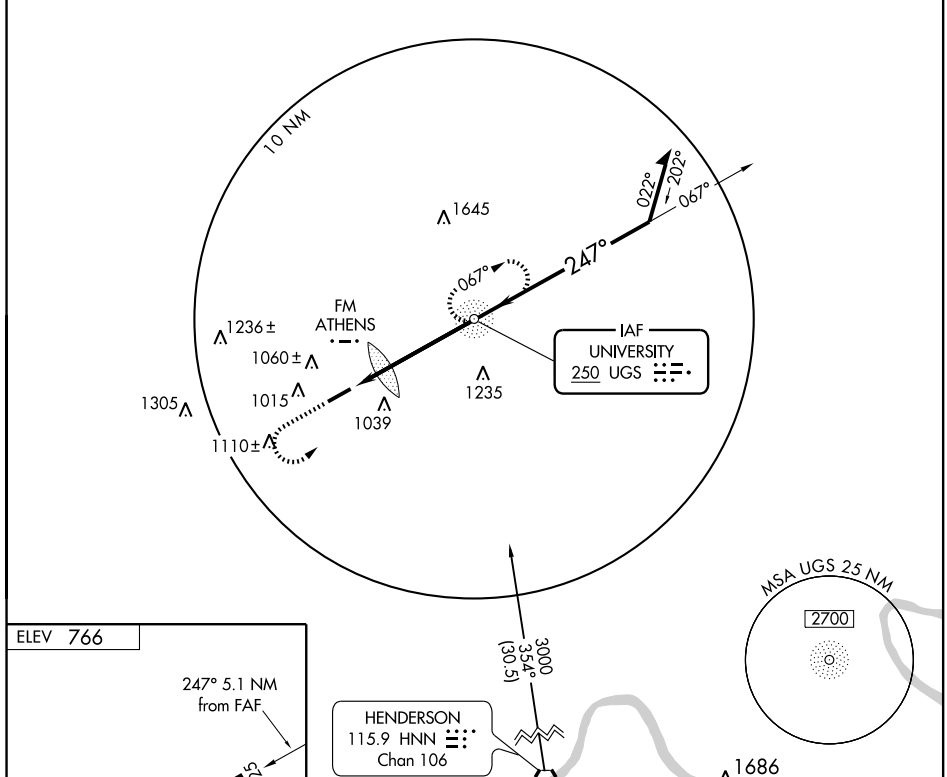
NDB RWY 25

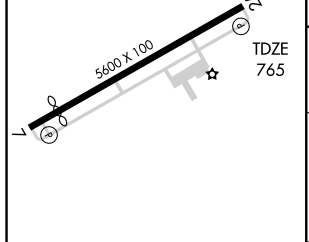
ATHENS (ALBANY)/OHIO UNIVERSITY SNYDER FIELD (UNI)

If local altimeter setting not received, use Parkersburg, WV altimeter setting and increase all MDAs 100 feet.

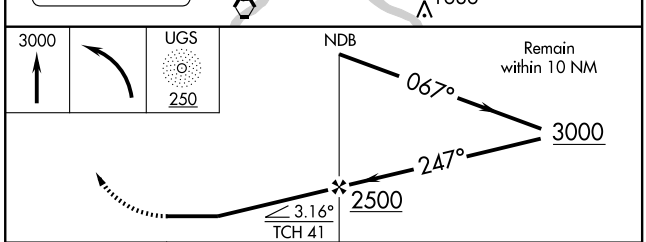
MISSED APPROACH: Climb to 3000, then left turn direct UGS NDB and hold.

AWOS-3	HUNTINGTON APP CON	CLNC DEL	UNICOM
128.325	120.95 270.1	120.95	123.075 (CTAF) L





MIRL Rwy 7-25 L
REIL Rwys 7 and 25 L



FAF to MAP 5.1 NM					
Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

CATEGORY	A	B	C	D
S-25	1380-1 615 (700-1)		1380-1¾ 615 (700-1¾)	1380-2 615 (700-2)
CIRCLING	1380-1 614 (700-1)	1420-1 654 (700-1)	1420-1¾ 654 (700-1¾)	1420-2 654 (700-2)

APP CRS	Rwy ldg	4700
067°	TDZE	765
	Apt Elev	766

RNAV (GPS) RWY 7

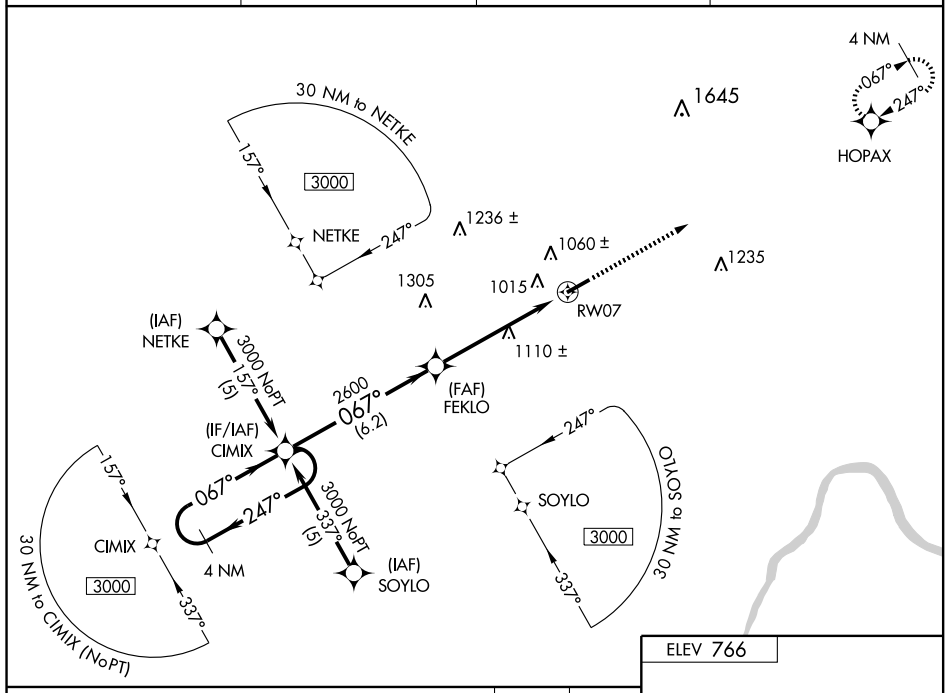
ATHENS (ALBANY)/ OHIO UNIVERSITY SNYDER FIELD (UNI)

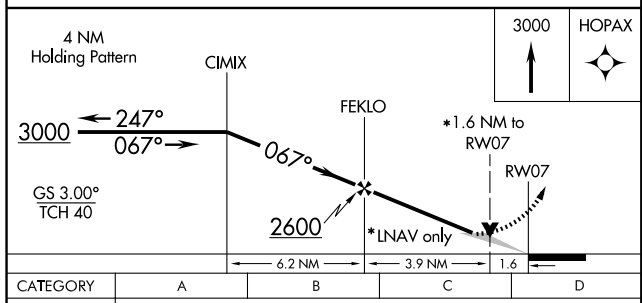
NA

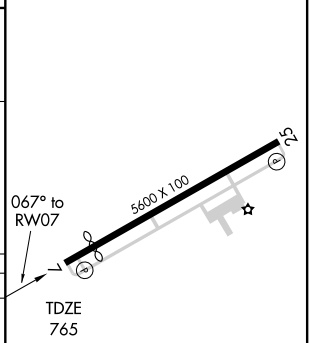
DME/DME RNP-0.3 NA. Baro-VNAV NA below -16°C (3°F).
If local altimeter setting not received, use Parkersburg, WV altimeter setting and increase DA and all MDAs 100 feet.
Baro-VNAV and VDP NA with Parkersburg, WV altimeter setting.

MISSED APPROACH: Climb to 3000 direct HOPAX and hold.

AWOS-3	HUNTINGTON APP CON	CLNC DEL	UNICOM
128.325	120.95 270.1	120.95	123.075 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	NA			
LNAV/ VNAV DA	1360-2¼ 595 (600-2¼)			
LNAV MDA	1360-1 595 (600-1)		1360-1½ 595 (600-1½)	1360-1¾ 595 (600-1¾)
CIRCLING	1380-2¼ 614 (700-2¼)	1420-2¼ 654 (700-2¼)		

MIRL Rwy 7-25 L
REIL Rwys 7 and 25 L

EC-2, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	5600
247°	TDZE	765
	Apt Elev	766

RNAV (GPS) RWY 25

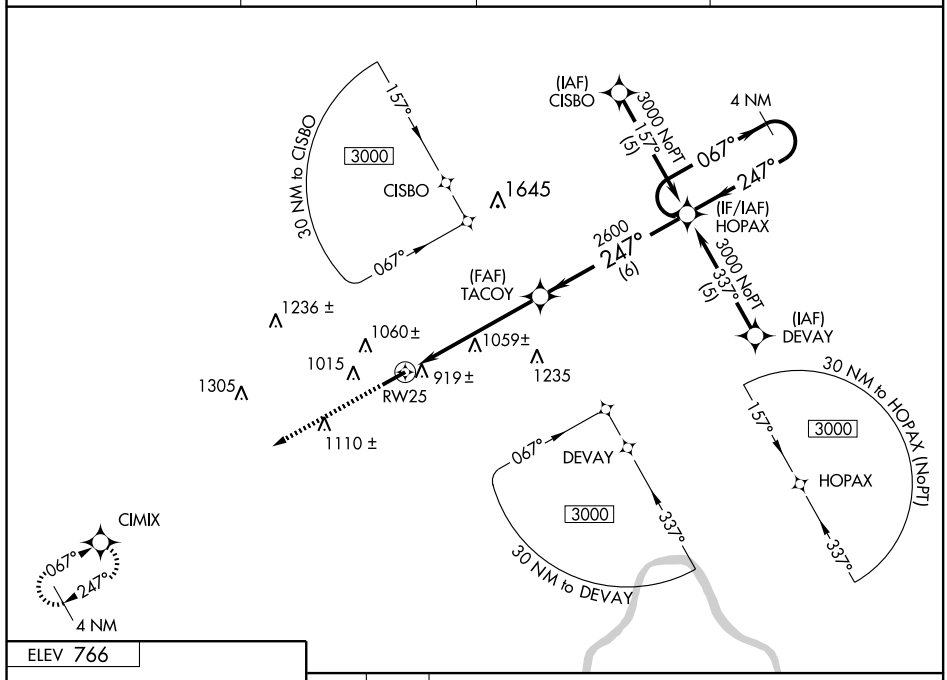
ATHENS (ALBANY)/OHIO UNIVERSITY SNYDER FIELD (UNI)

NA

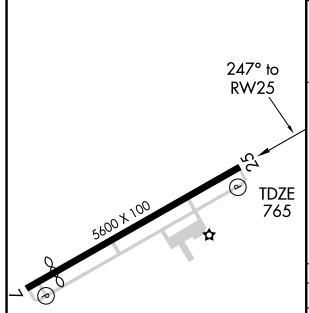
DME/DME RNP-0.3 NA. Baro-VNAV NA below -16°C (3°F).
If local altimeter setting not received, use Parkersburg, WV altimeter setting and increase DA and all MDAs 100 feet.
Baro-VNAV and VDP NA with Parkersburg, WV altimeter setting.

MISSED APPROACH: Climb to 3000 direct CIMIX WP and hold.

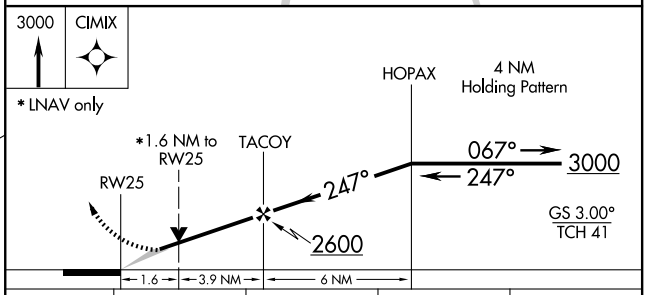
AWOS-3	HUNTINGTON APP CON		CLNC DEL	UNICOM
128.325	120.95	270.1	120.95	123.075 (CTAF) L



ELEV 766



MIRL Rwy 7-25 L
REIL Rwys 7 and 25 L



CATEGORY	A	B	C	D
LPV DA	NA			
LNAV/VNAV DA	1180-1½ 415 (500-1½)			
LNAV MDA	1320-1 555 (600-1)		1320-1½ 555 (600-1½)	1320-1¾ 555 (600-1¾)
CIRCLING	1380-1½ 614 (700-1½)	1420-1½ 654 (700-1½)	1420-1¾ 654 (700-1¾)	1420-2 654 (700-2)

EC-2, 14 JAN 2010 to 11 FEB 2010

APP CRS		
274°	Rwy ldg	4004
	TDZE	1312
	Apt Elev	1312

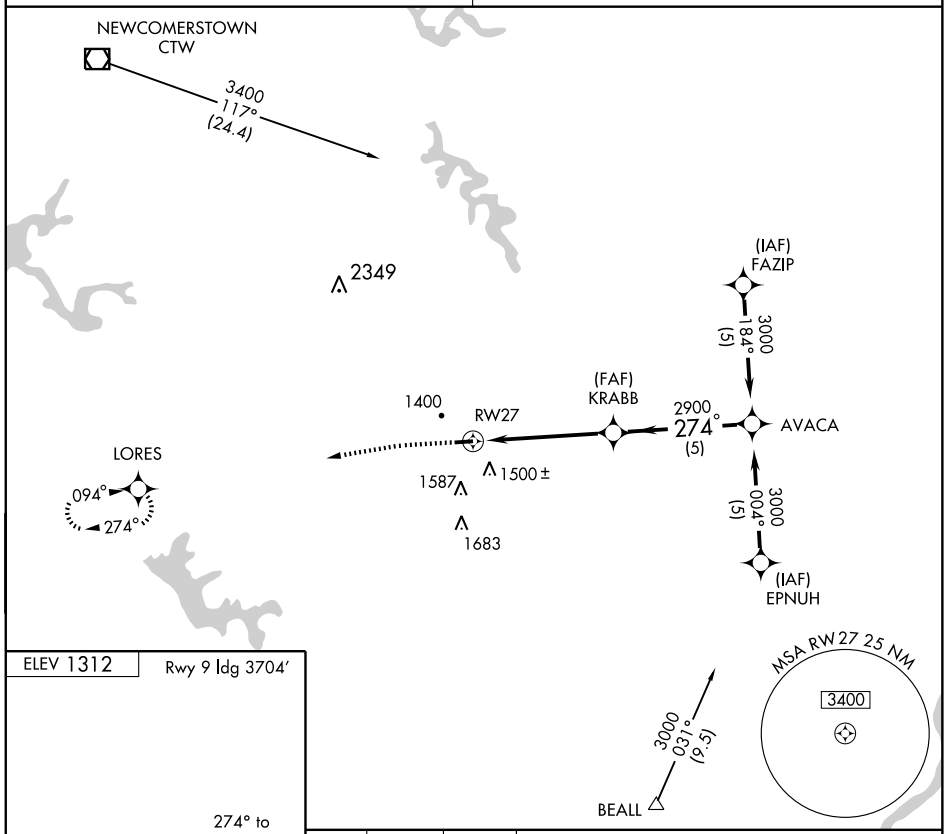
GPS RWY 27
BARNESVILLE-BRADFIELD (6G5)

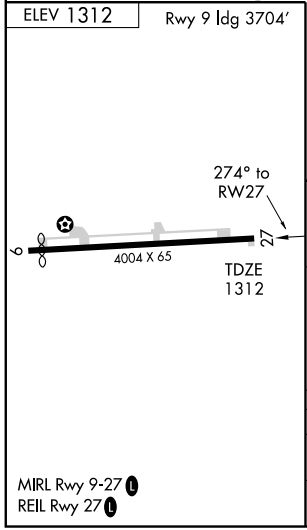
NA

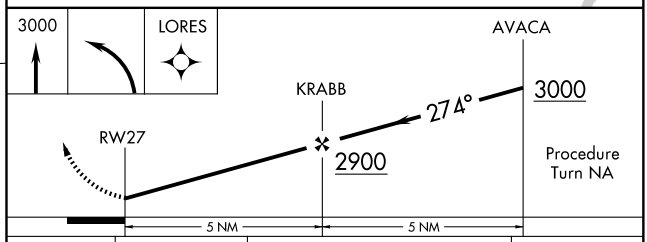
Use Wheeling, WV altimeter setting.

MISSED APPROACH: Climb to 3000, then left turn direct LORES WP and hold.

CLEVELAND CENTER	UNICOM
120.4 257.975	123.0 (CTAF) L







CATEGORY	A	B	C	D
S-27	1840-1 528 (600-1)		NA	
CIRCLING	1880-1 568 (600-1)		NA	

VOR/DME AIR	APP CRS	Rwy ldg	4004
117.1	274°	TDZE	1313
Chan 118		Apt Elev	1313

VOR/DME RWY 27

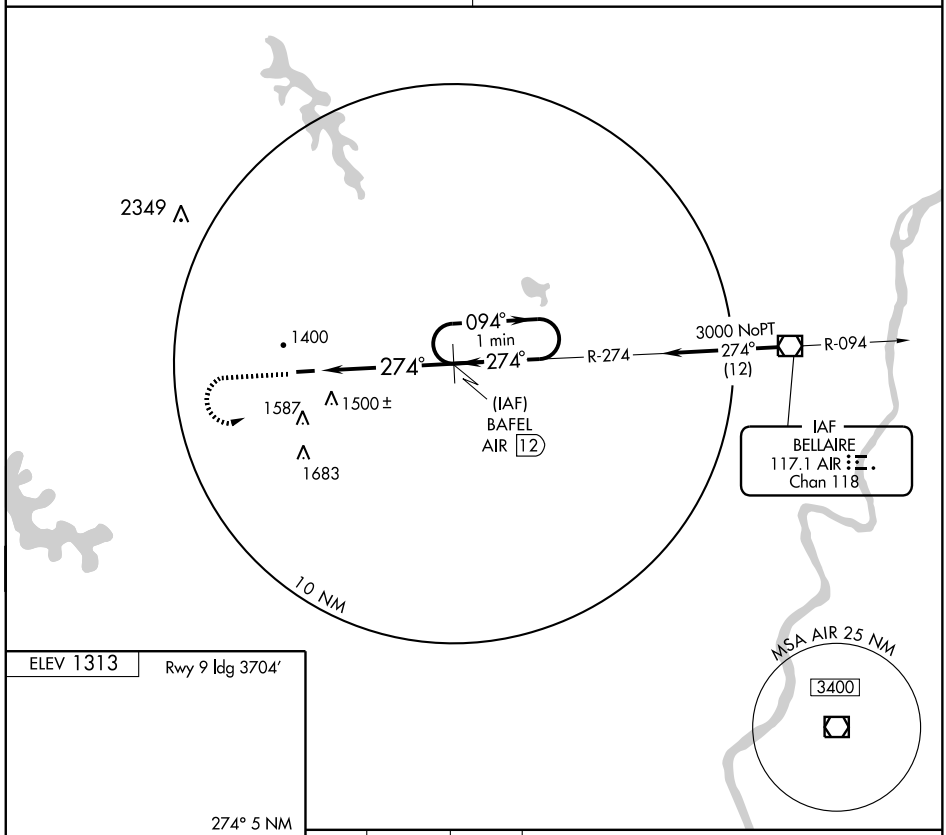
BARNESVILLE-BRADFIELD (6G5)

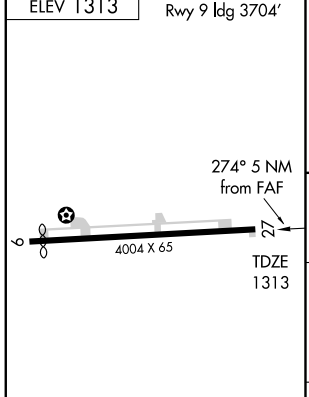
NA

Use Wheeling, WV altimeter setting.

MISSED APPROACH: Climb to 3000, then left turn via AIR R-274 to BAFEL/12 DME and hold.

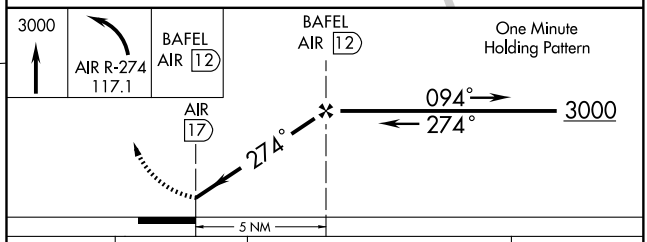
CLEVELAND CENTER	UNICOM
120.4 257.975	123.0 (CTAF) L





MIRL Rwy 9-27 L
REIL Rwy 27 L

Knots	60	90	120	150	180
Min:Sec					

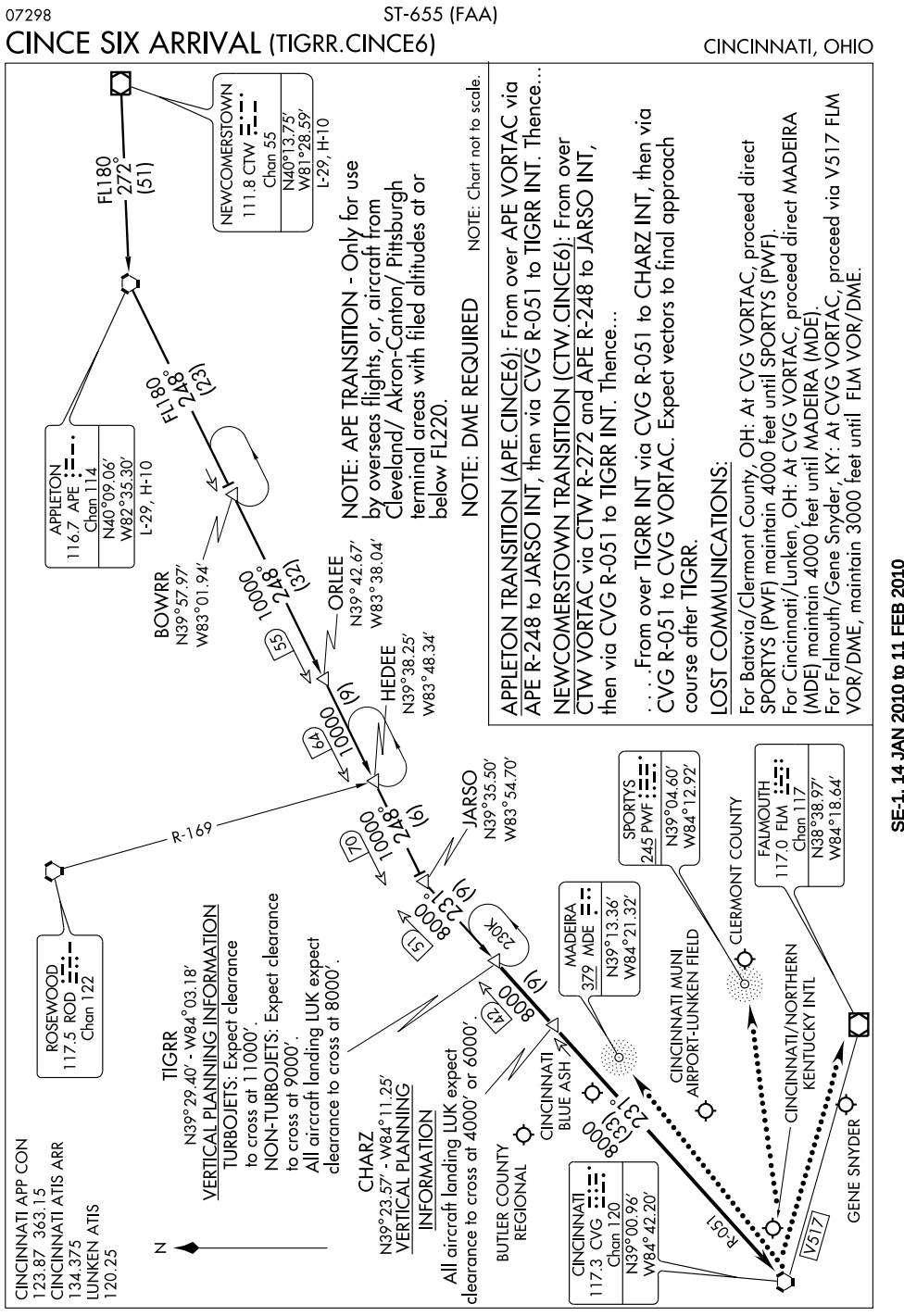


CATEGORY	A	B	C	D
S-27	1840-1	527 (600-1)	NA	
CIRCLING	1880-1	567 (600-1)	NA	

EC-2, 14 JAN 2010 to 11 FEB 2010

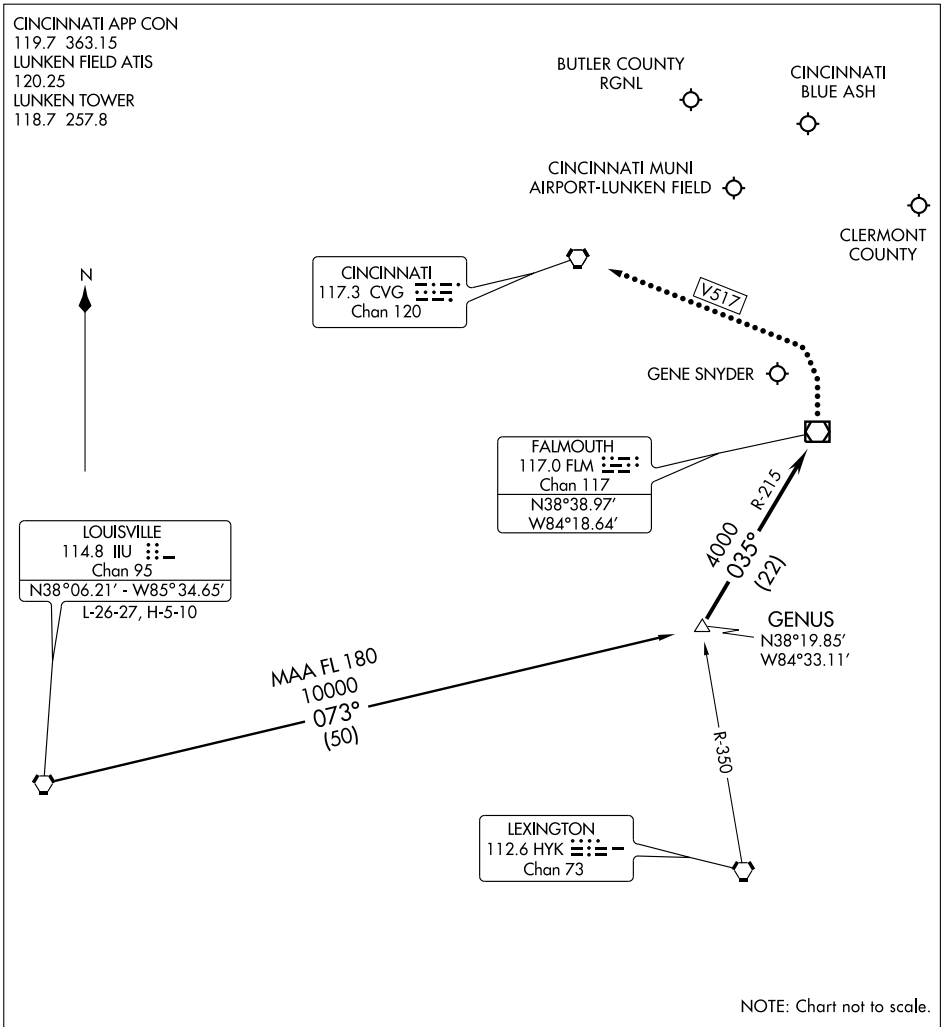
CINCE SIX ARRIVAL (TIGRR.CINCE6)

CINCINNATI, OHIO



GENUS ONE ARRIVAL

CINCINNATI, OHIO



ARRIVAL ROUTE DESCRIPTION

LOUISVILLE TRANSITION (IIU.GENUS1): From over IIU VORTAC via IIU R-073 to GENUS INT. Thence . . . .

. . . . From over GENUS INT via FLM R-215 (MEA 4000) to FLM VOR/DME. Expect radar vectors to final approach course after FLM VOR/DME.

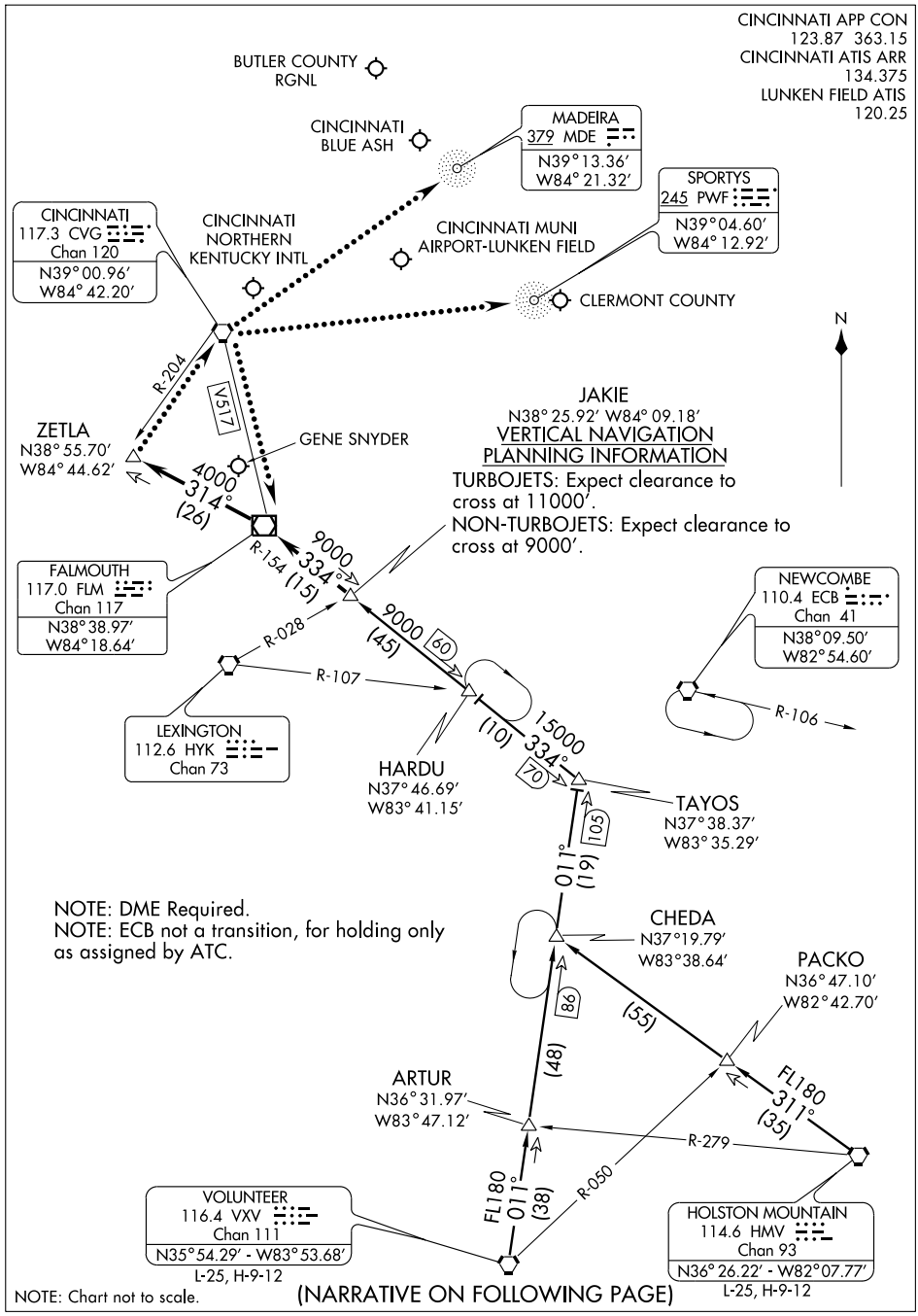
LOST COMMUNICATIONS

BUTLER COUNTY RGNL: In the event of lost communications, at FLM VOR/DME proceed V517 to CVG VORTAC. Maintain 3000 MSL until CVG VORTAC.

EC-2, 14 JAN 2010 to 11 FEB 2010

HARDU TWO ARRIVAL (JAKIE.HARDU2)

CINCINNATI, OHIO



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

HARDU TWO ARRIVAL (JAKIE.HARDU2) CINCINNATI, OHIO

ARRIVAL DESCRIPTION

HOLSTON MOUNTAIN TRANSITION (HMV.HARDU2): From over HMV VORTAC via HMV R-311 and VXV R-011 to TAYOS INT, then via FLM R-154 to JAKIE INT. Thence. . . .
VOLUNTEER TRANSITION (VXV.HARDU2): From over VXV VORTAC via VXV R-011 and FLM R-154 to JAKIE INT. Thence. . . .

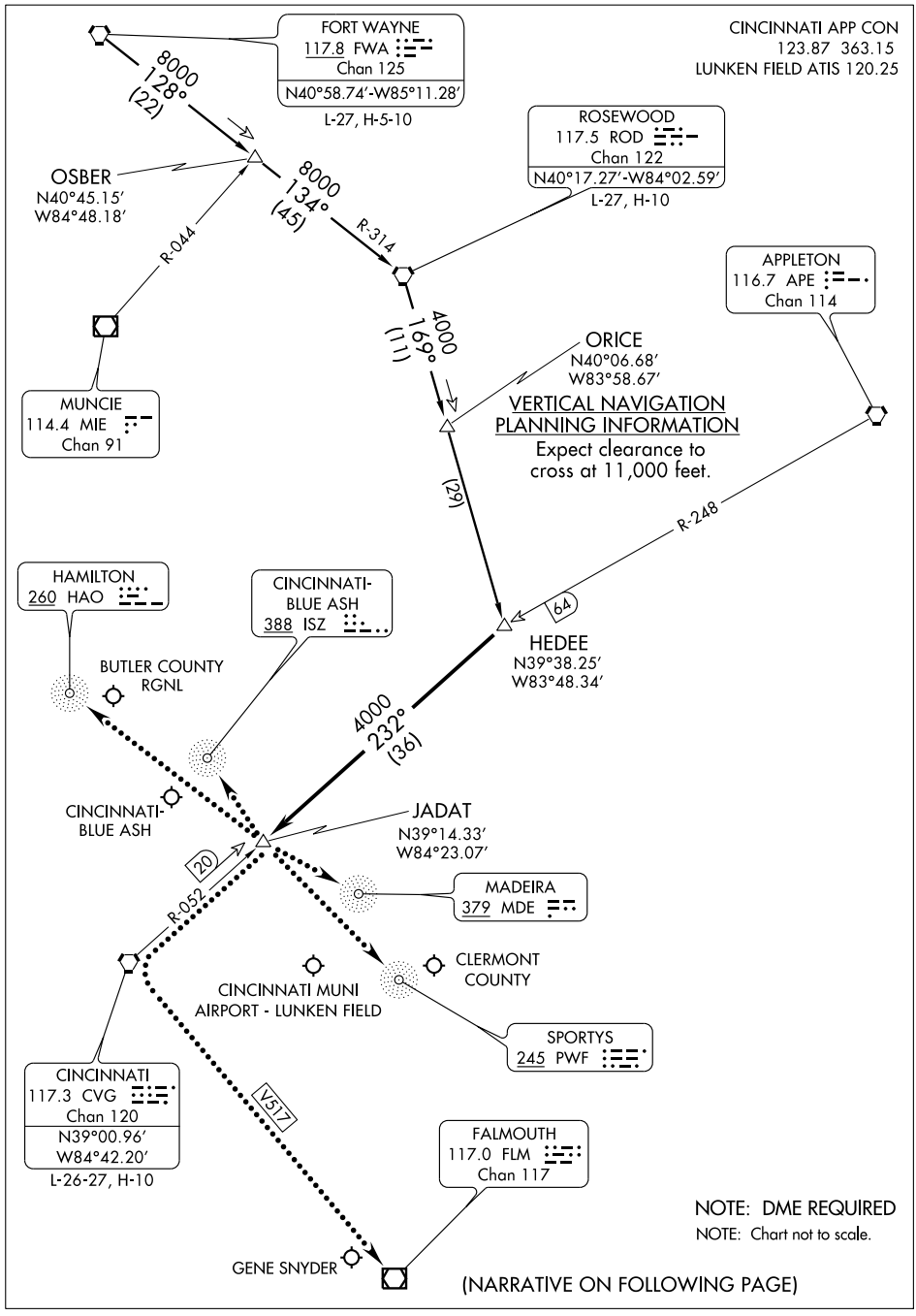
. . . .From over JAKIE INT via FLM R-154 to FLM VOR/DME, then via FLM R-314 to ZETLA INT. Expect vectors to final approach course after JAKIE INT.

LOST COMMUNICATIONS:
For Batavia/Clermont County, OH: At ZETLA INT, proceed direct to CVG VORTAC then direct SPORTYS (PWF). Maintain 4000 feet until SPORTYS (PWF).
For Butler County Rgnl, OH: At ZETLA INT, proceed direct to CVG VORTAC. Maintain 3000 feet until CVG VORTAC.
For Cincinnati/Blue Ash, OH: At ZETLA INT, proceed direct CVG VORTAC, then V517 FLM VOR/DME. Maintain 4000 feet until FLM VOR/DME.
For Cincinnati/Lunken, OH: At ZETLA INT, proceed direct CVG VORTAC then direct MADEIRA (MDE). Maintain 4000 until MADEIRA (MDE).
For Falmouth/Gene Snyder, KY: At ZETLA INT, proceed direct CVG VORTAC then via V517 FLM VOR/DME. Maintain 3000 feet until FLM VOR/DME.

SE-1, 14 JAN 2010 to 11 FEB 2010

HEDEE ONE ARRIVAL

CINCINNATI, OHIO



(NARRATIVE ON FOLLOWING PAGE)

HEDEE ONE ARRIVAL (HEDEE.HEDEE1)

ARRIVAL ROUTE DESCRIPTION

FORT WAYNE TRANSITION (FWA.HEDEE1): From over FWA VORTAC via FWA R-128 to OSBER/FWA 22 DME, then via ROD R-134 to ROD VORTAC, then via ROD R-169 to HEDEE INT. Thence. . . .
ROSEWOOD TRANSITION (ROD.HEDEE1): From over ROD VORTAC via ROD R-169 to HEDEE INT. Thence. . . .

. . . .From over HEDEE INT via CVG R-052 (MEA 4,000) to JADAT/CVG 20 DME. Expect radar vectors to final approach course at JADAT.

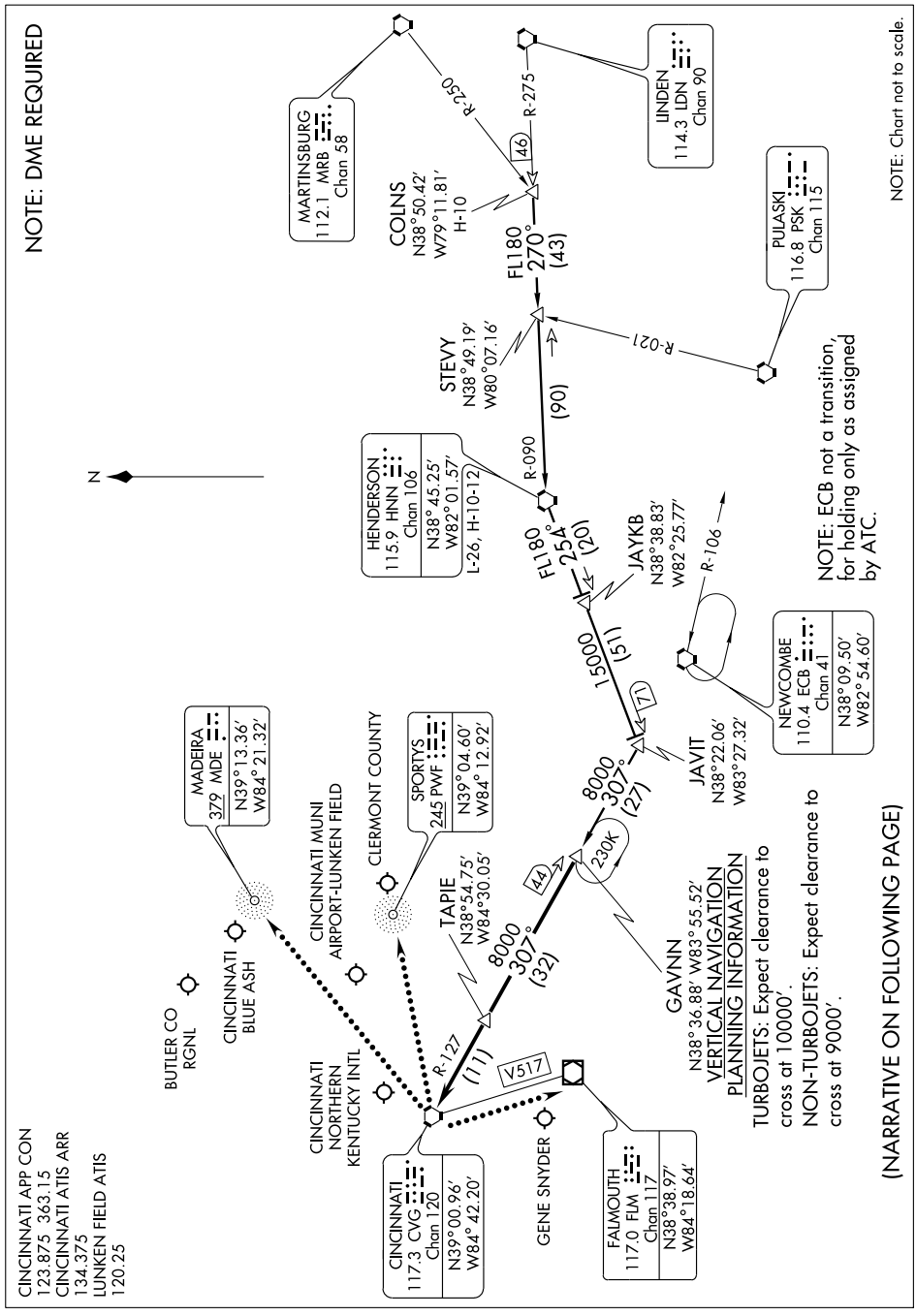
LOST COMMUNICATION PROCEDURE
In the event of lost communications for:

BUTLER COUNTY RGNL - At JADAT, proceed direct HAMILTON (HAO), maintain 4,000 feet until HAMILTON (HAO).
CINCINNATI MUNI AIRPORT - LUNKEN FIELD - At JADAT, proceed direct MADEIRA (MDE), maintain 4,000 feet until MADEIRA (MDE).
CINCINNATI BLUE ASH - At JADAT, proceed direct BLUE ASH (ISZ), maintain 4,000 feet until BLUE ASH (ISZ).
CLERMONT COUNTY - At JADAT, proceed direct SPORTYS (PWF), maintain 4,000 feet until SPORTYS (PWF).
GENE SNYDER - At JADAT, proceed direct CVG VORTAC then via V517 to FLM VOR/DME, maintain 4,000 feet until FLM VOR/DME.

EC-2, 14 JAN 2010 to 11 FEB 2010

JAVIT TWO ARRIVAL (GAVNN.JAVIT2)

CINCINNATI, OHIO



(NARRATIVE ON FOLLOWING PAGE)

JAVIT TWO ARRIVAL (GAVNN.JAVIT2)

ARRIVAL DESCRIPTION

COLNS TRANSITION (COLNS.JAVIT2): From over COLNS INT via HNN R-090 to HNN VORTAC then via HNN R-254 to JAVIT INT, then via CVG R-127 to GAVNN INT. Thence...

HENDERSON TRANSITION (HNN.JAVIT2): From over HNN VORTAC via HNN R-254 to JAVIT INT, then via CVG R-127 to GAVNN INT. Thence. . . .

. . . .From over GAVNN INT via CVG R-127 to TAPIE , then via CVG R-127 to CVG VORTAC.

Expect vectors to final approach course after GAVNN.

LOST COMMUNICATIONS:

For Batavia/Clermont County, OH: At CVG VORTAC, proceed direct SPORTYS (PWF) maintain 4000 feet until SPORTYS (PWF).

For Cincinnati/Lunken, OH: At CVG VORTAC, proceed direct MADEIRA (MDE) maintain 4000 feet until MADEIRA (MDE).

For Falmouth/Gene Snyder, KY: At CVG VORTAC, proceed via V517 FLM VOR/DME, maintain 3000 feet until FLM VOR/DME.

SE-1, 14 JAN 2010 to 11 FEB 2010

NDB PWF	APP CRS	Rwy ldg	3566
245	228°	TDZE	841
		Apt Elev	844

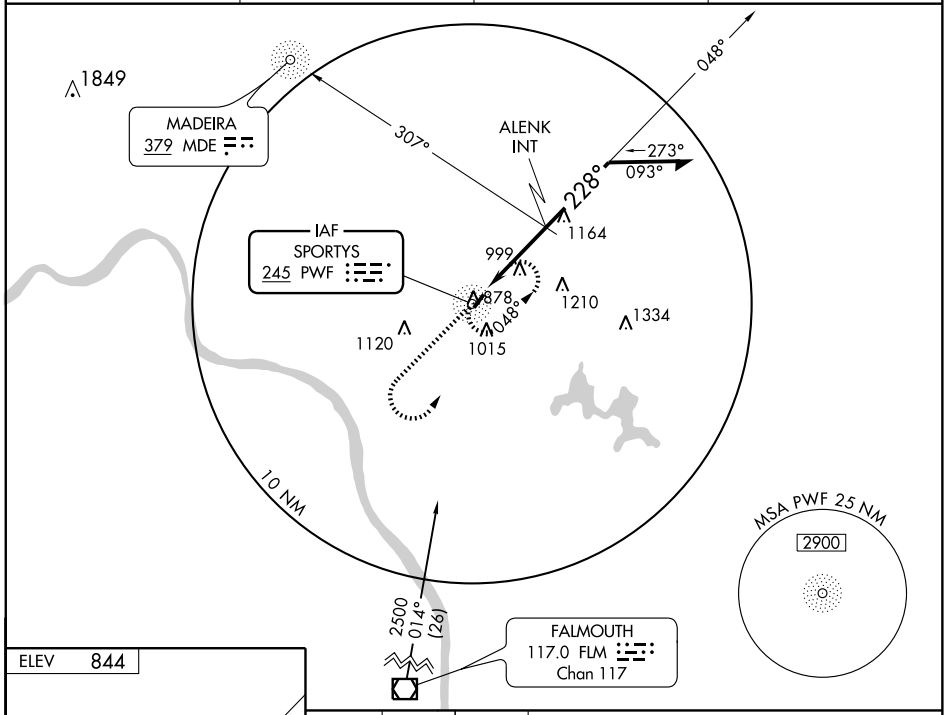
NDB RWY 22

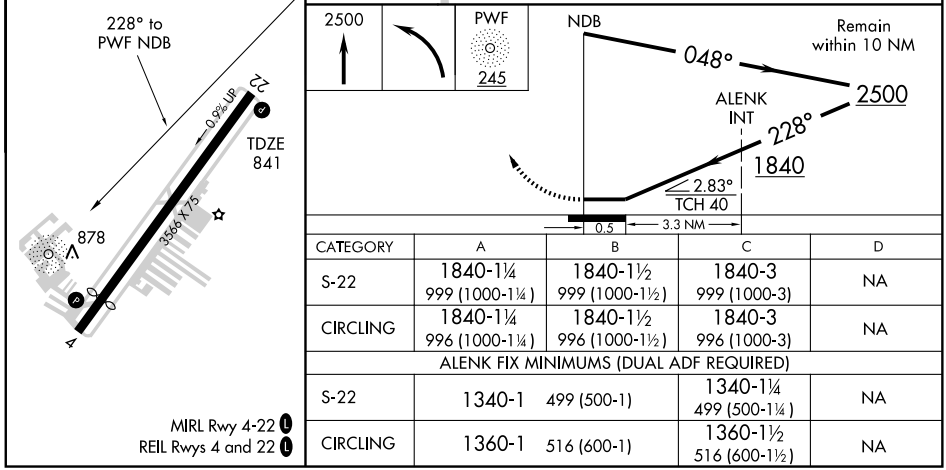
BATAVIA / CLERMONT COUNTY (I69)

NA Use Cincinnati-Blue Ash altimeter setting, if not received, use Cincinnati Lunken Field altimeter setting and increase all MDAs 40 feet.

MISSED APPROACH: Climb to 2500 then left turn direct PWF NDB and hold.

CINCINNATI-BLUE ASH AWOS-3	CINCINNATI APP CON	CLNC DEL	UNICOM
118.475	121.0 257.725	124.9	122.975 (CTAF) L





CATEGORY	A	B	C	D
S-22	1840-1¼ 999 (1000-1¼)	1840-1½ 999 (1000-1½)	1840-3 999 (1000-3)	NA
CIRCLING	1840-1¼ 996 (1000-1¼)	1840-1½ 996 (1000-1½)	1840-3 996 (1000-3)	NA
ALENK FIX MINIMUMS (DUAL ADF REQUIRED)				
S-22	1340-1 499 (500-1)		1340-1¼ 499 (500-1¼)	NA
CIRCLING	1360-1 516 (600-1)		1360-1½ 516 (600-1½)	NA

MIRL Rwy 4-22 L
REIL Rwys 4 and 22 L

APP CRS	Rwy ldg	3170
040°	TDZE	841
	Apt Elev	844

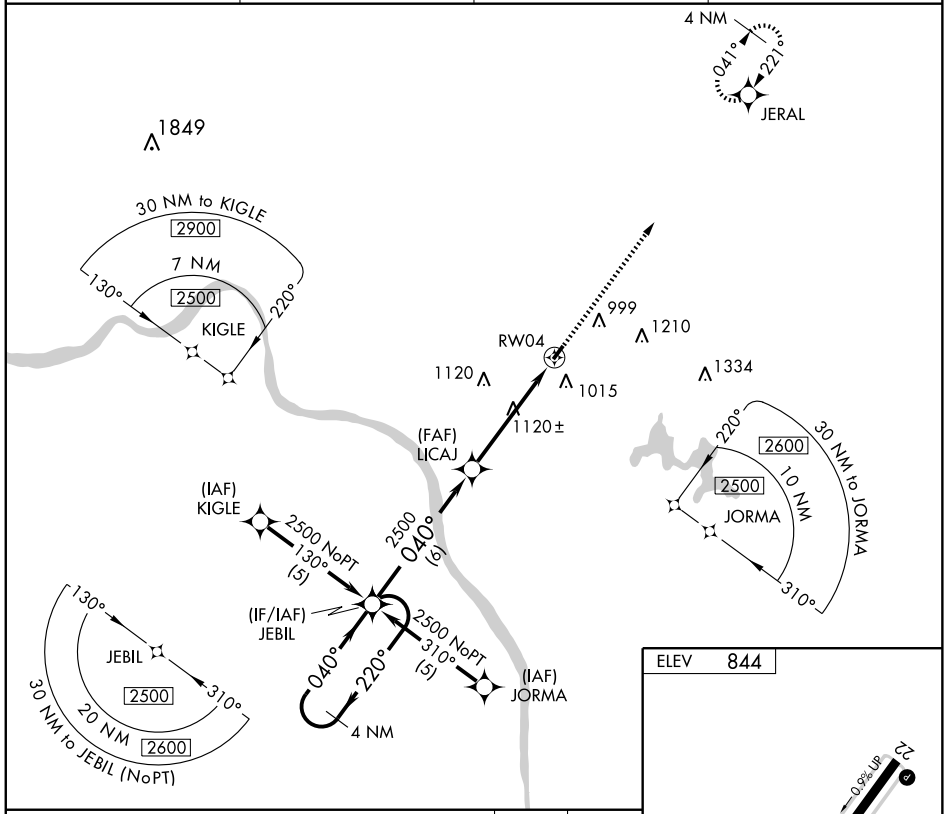
RNAV (GPS) RWY 4

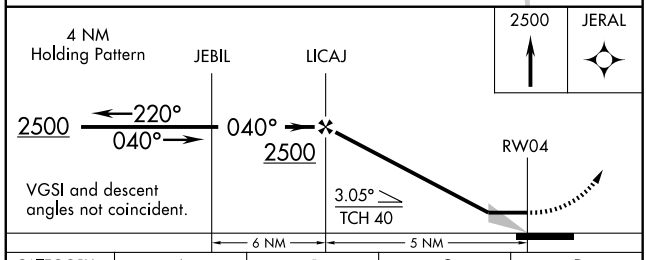
BATAVIA / CLERMONT COUNTY (I69)

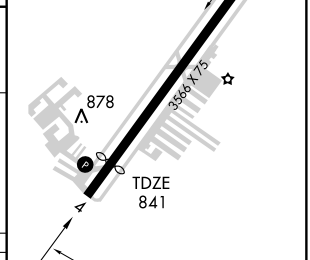
NA DME/DME RNP-0.3 NA. Use Cincinnati-Blue Ash altimeter setting, if not received, use Cincinnati Lunken Field altimeter setting and increase all MDAs 40 feet.

MISSED APPROACH: Climb to 2500 direct JERAL and hold.

CINCINNATI-BLUE ASH AWOS-3	CINCINNATI APP CON	CLNC DEL	UNICOM
118.475	121.0 257.725	124.9	122.975 (CTAF) L







MIRL Rwy 4-22 L
REIL Rwys 4 and 22 L

CATEGORY	A	B	C	D
LNAV MDA	1460-1 619 (700-1)		1460-1¾ 619 (700-1¾)	NA
CIRCLING	1460-1 616 (700-1)		1460-1¾ 616 (700-1¾)	NA

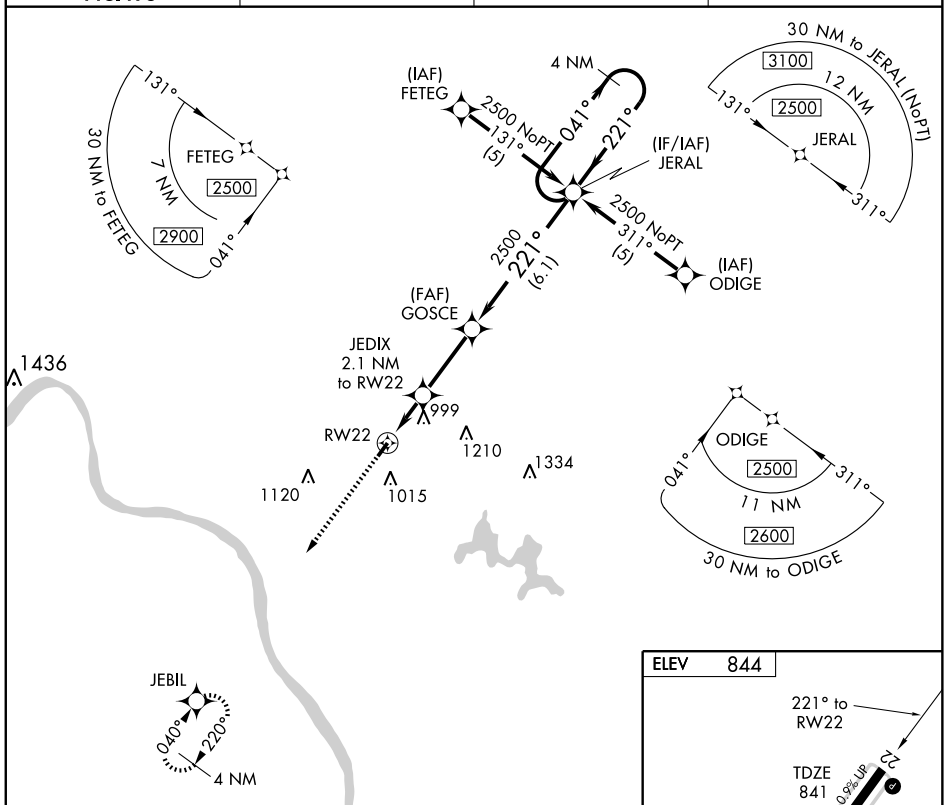
APP CRS	Rwy ldg	3566
221°	TDZE	841
	Apt Elev	844

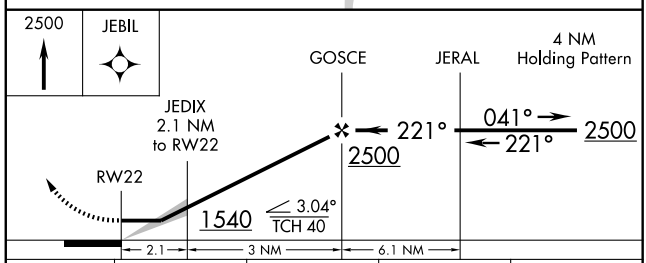
RNAV (GPS) RWY 22
BATAVIA / CLERMONT COUNTY (I69)

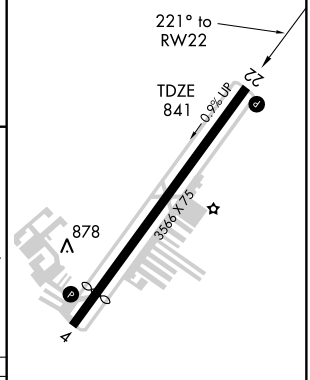
NA DME/DME RNP-0.3 NA. Use Cincinnati-Blue Ash altimeter setting, if not received, use Cincinnati Lunken Field altimeter setting and increase all MDAs 40 feet.

MISSED APPROACH: Climb to 2500 direct JEBIL and hold.

CINCINNATI-BLUE ASH AWOS-3	CINCINNATI APP CON	CLNC DEL	UNICOM
118.475	121.0 257.725	124.9	122.975 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	1300-1 459 (500-1)		1300-1¼ 459 (500-1¼)	NA
CIRCLING	1360-1 516 (600-1)		1360-1½ 516 (600-1½)	NA

MIRL Rwy 4-22 L
REIL Rwys 4 and 22 L

EC-2, 14 JAN 2010 to 11 FEB 2010

VOR/DME FLM	APP CRS	Rwy ldg	N/A
117.0	014°	TDZE	N/A
Chan 117		Apt Elev	844

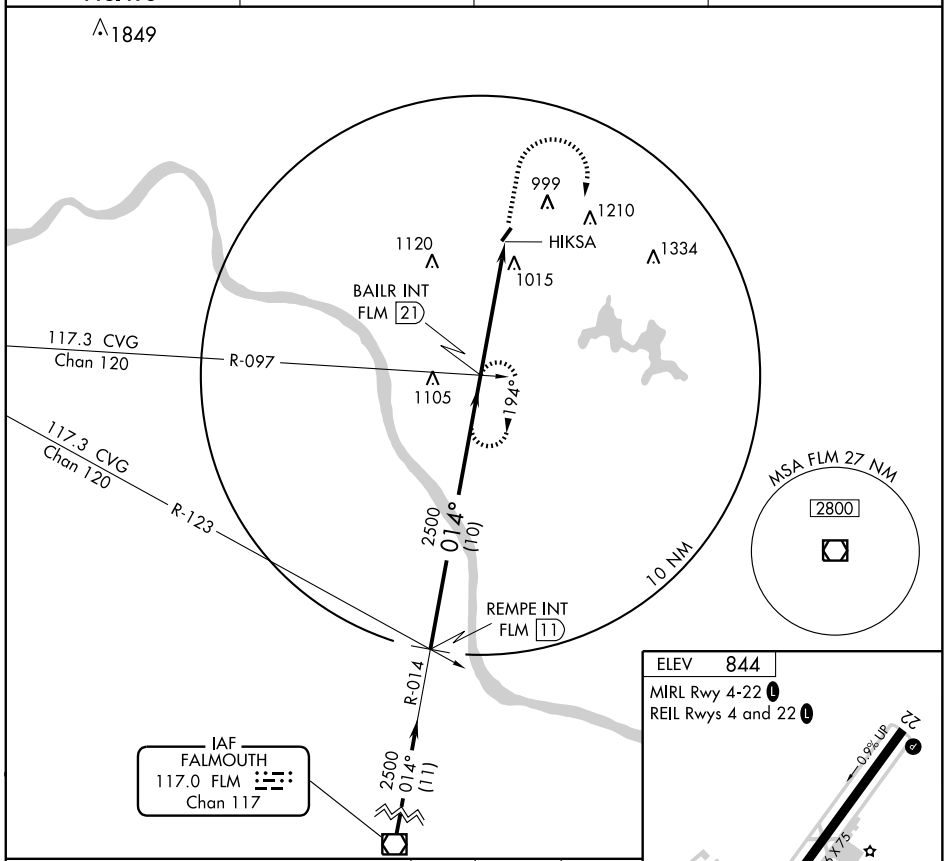
VOR-B

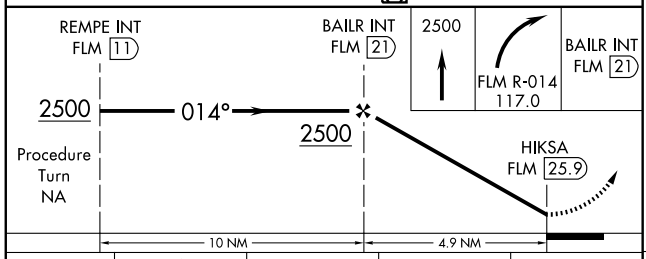
BATAVIA / CLERMONT COUNTY (I69)

NA Use Cincinnati-Blue Ash altimeter setting, if not received, use Cincinnati Lunken Field altimeter setting and increase all MDAs 40 feet.

MISSED APPROACH: Climb to 2500 then right turn via FLM R-014 to BAILR Int/21 DME and hold.

CINCINNATI-BLUE ASH AWOS-3	CINCINNATI APP CON	CLNC DEL	UNICOM
118.475	121.0 257.725	124.9	122.975 (CTAF) L

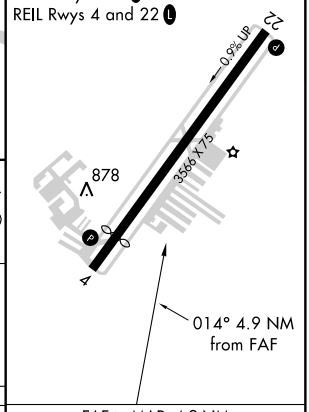




ELEV 844

MIRL Rwy 4-22 L

REIL Rwys 4 and 22 L



CATEGORY	A	B	C	D
CIRCLING	1420-1 576 (600-1)	1420-1¼ 576 (600-1¼)	1420-1½ 576 (600-1½)	NA

FAF to MAP 4.9 NM					
Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38

EC-2. 14 JAN 2010 to 11 FEB 2010

VOR/DME CTW 111.8 Chan 55	APP CRS 359°	Rwy ldg N/A TDZE N/A Apt Elev 984

VOR or GPS-A
BEACH CITY (2D7)

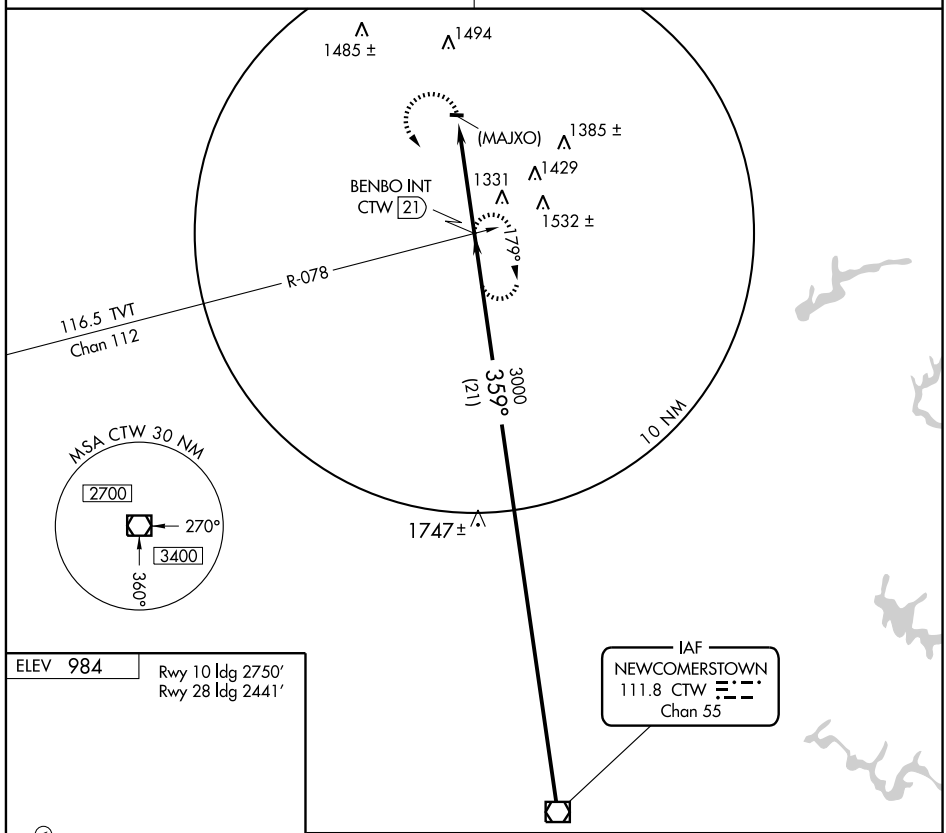
NA

Use Akron-Canton altimeter setting.

MISSED APPROACH: Climbing left turn to 3000 via CTW R-359 to BENBO Int/CTW 21 DME and hold.

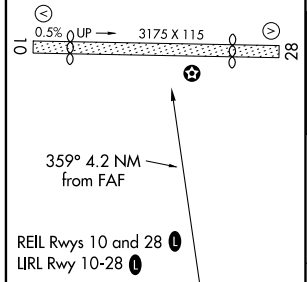
AKRON-CANTON APP CON ★
125.5 371.875

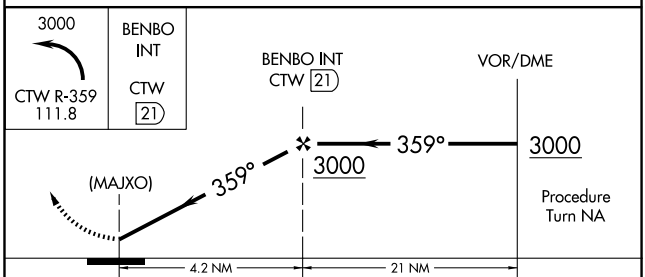
UNICOM
122.8 (CTAF) 122.85 L



ELEV 984

Rwy 10 ldg 2750′
Rwy 28 ldg 2441′





FAF to MAP 4.2 NM					
Knots	60	90	120	150	180
Min:Sec	4:12	2:48	2:06	1:41	1:24

CATEGORY	A	B	C	D
CIRCLING	1720-1 736 (800-1)	NA		

APP CRS	Rwy ldg	4999
074°	TDZE	1113
	Apt Elev	1123

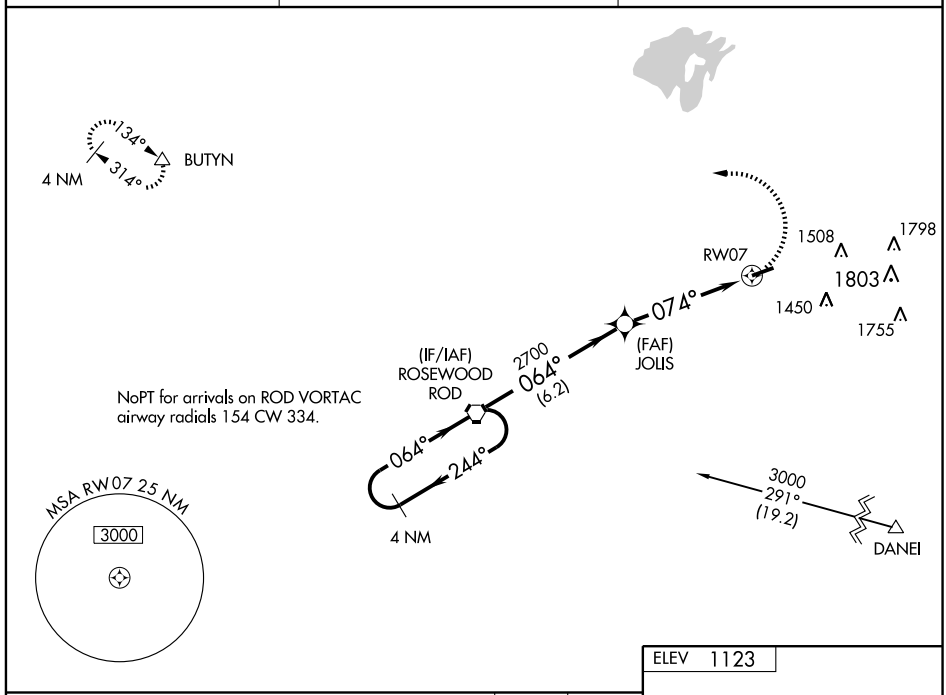
RNAV (GPS) RWY 7
BELLEFONTAINE RGNL (EDJ)

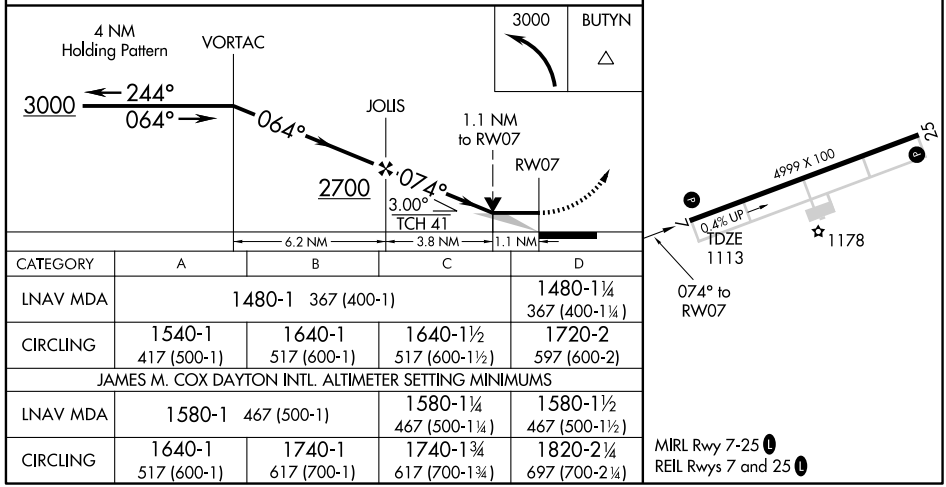
NA

Obtain local altimeter on CTAF; when not received use James M. Cox Dayton Intl altimeter setting. VDP NA with James M. Cox Dayton Intl altimeter setting. GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing left turn to 3000 direct BUTYN WP and hold.

AWOS-3	DAYTON APP CON	UNICOM
118.075	118.425 294.5	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	1480-1 367 (400-1)			1480-1¼ 367 (400-1¼)
CIRCLING	1540-1 417 (500-1)	1640-1 517 (600-1)	1640-1½ 517 (600-1½)	1720-2 597 (600-2)
JAMES M. COX DAYTON INTL. ALTIMETER SETTING MINIMUMS				
LNAV MDA	1580-1 467 (500-1)		1580-1¼ 467 (500-1¼)	1580-1½ 467 (500-1½)
CIRCLING	1640-1 517 (600-1)	1740-1 617 (700-1)	1740-1¾ 617 (700-1¾)	1820-2¼ 697 (700-2¼)

MIRL Rwy 7-25 L
REIL Rwys 7 and 25 L

EC-2, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	4999
254°	TDZE	1123
	Apt Elev	1123

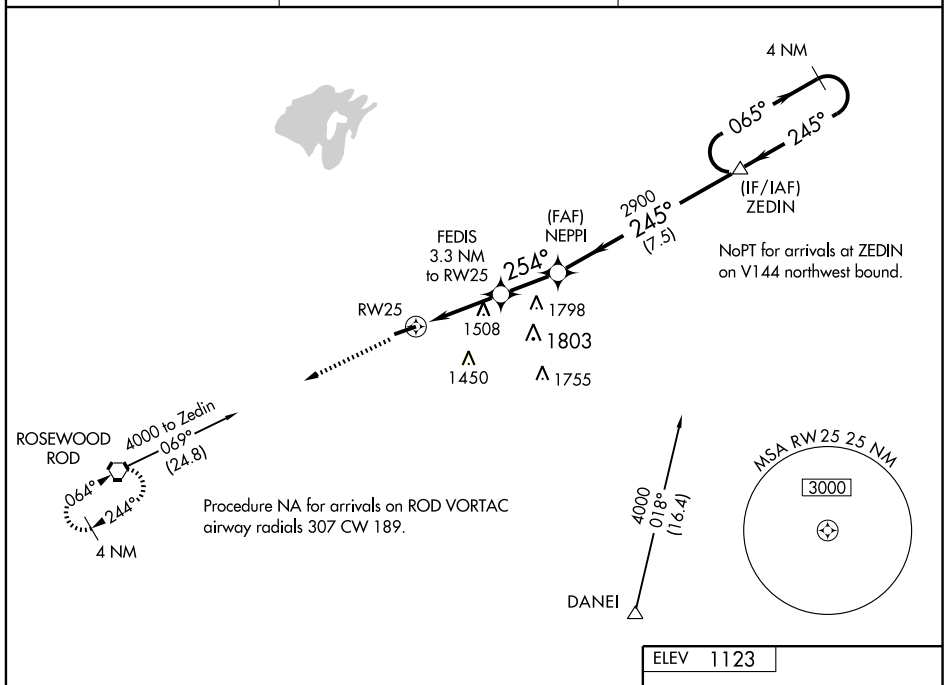
RNAV (GPS) RWY 25
BELLEFONTAINE RGNL (EDJ)

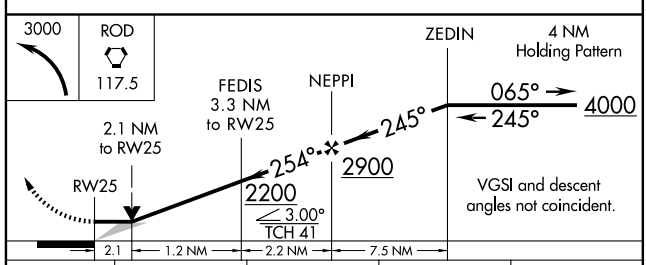
NA

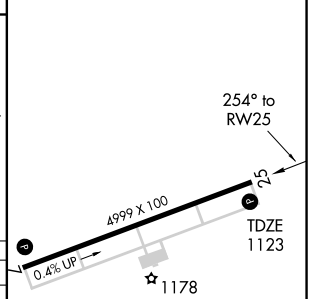
Obtain local altimeter on CTAF; when not received use James M. Cox Dayton Intl altimeter setting. VDP NA with James M. Cox Intl altimeter setting. GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climbing left turn to 3000 direct ROD VORTAC and hold.

AWOS-3	DAYTON APP CON	UNICOM
118.075	118.425 294.5	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	1820-1 697 (700-1)		1820-2 697 (700-2)	1820-2¼ 697 (700-2¼)
CIRCLING	1820-1 697 (700-1)		1820-2 697 (700-2)	1820-2¼ 697 (700-2¼)
JAMES M. COX DAYTON INTL. ALTIMETER SETTING MINIMUMS				
LNAV MDA	1920-1 797 (800-1)	1920-1¼ 797 (800-1¼)	1920-2¼ 797 (800-2¼)	1920-2½ 797 (800-2½)
CIRCLING	1920-1 797 (800-1)	1920-1¼ 797 (800-1¼)	1920-2¼ 797 (800-2¼)	1920-2½ 797 (800-2½)

MIRL Rwy 7-25 L
REIL Rwys 7 and 25 L

EC-2, 14 JAN 2010 to 11 FEB 2010

VORTAC ROD	APP CRS		
117.5	068°	Rwy ldg	4999
Chan 122		TDZE	1113
		Apt Elev	1123

VOR/DME RWY 7

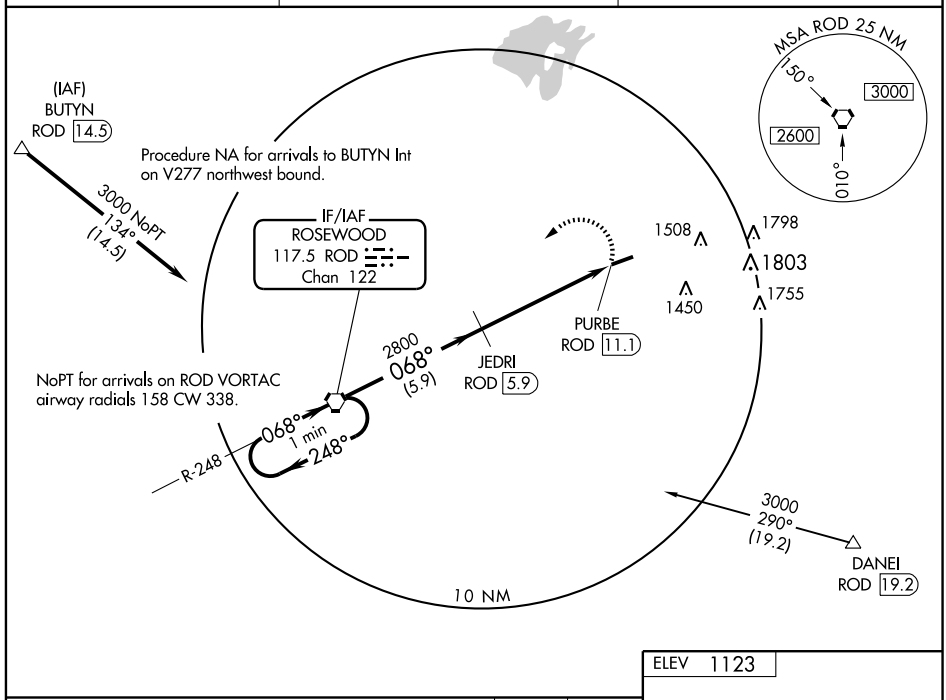
BELLEFONTAINE RGNL (EDJ)

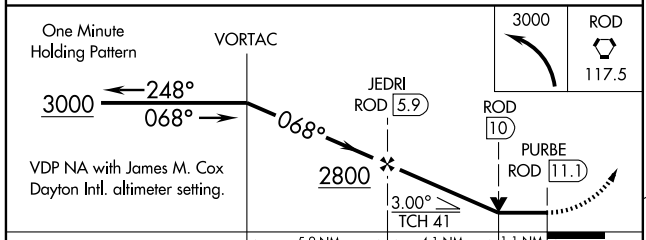
NA

Obtain local altimeter on CTAF; when not received use James M. Cox Dayton Intl altimeter setting.

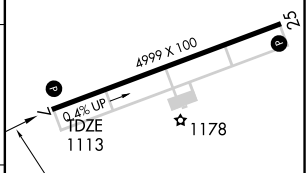
MISSED APPROACH: Climbing left turn to 3000 direct ROD VORTAC and hold.

AWOS-3	DAYTON APP CON	UNICOM
118.075	118.425 294.5	122.8 (CTAF) L





ELEV 1123



CATEGORY	A	B	C	D
S-7	1480-1 367 (400-1)			1480-1¼ 367 (400-1¼)
CIRCLING	1540-1 417 (500-1)	1640-1 517 (600-1)	1640-1½ 517 (600-1½)	1720-2 597 (600-2)
JAMES M. COX DAYTON INTL. ALTIMETER SETTING MINIMUMS				
S-7	1580-1 467 (500-1)		1580-1¼ 467 (500-1¼)	1580-1½ 467 (500-1½)
CIRCLING	1640-1 517 (600-1)	1740-1 617 (700-1)	1740-1¾ 617 (700-1¾)	1820-2¼ 697 (700-2¼)

MIRL Rwy 7-25 L
REIL Rwys 7 and 25 L

VORTAC ROD	APP CRS	Rwy ldg	4999
117.5	249°	TDZE	1123
Chan 122		Apt Elev	1123

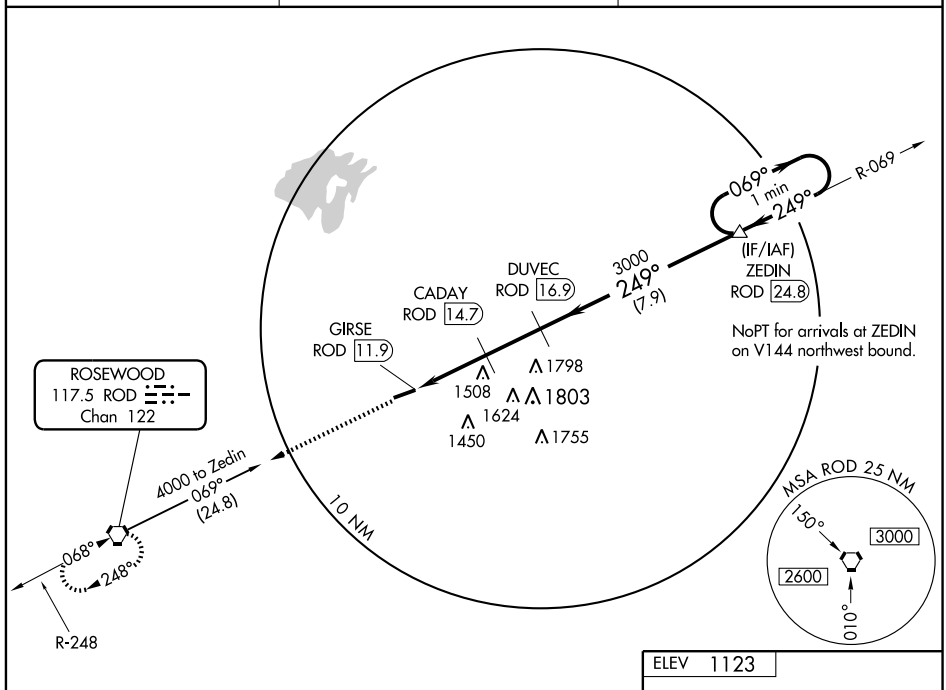
VOR/DME RWY 25
BELLEFONTAINE RGNL (EDJ)

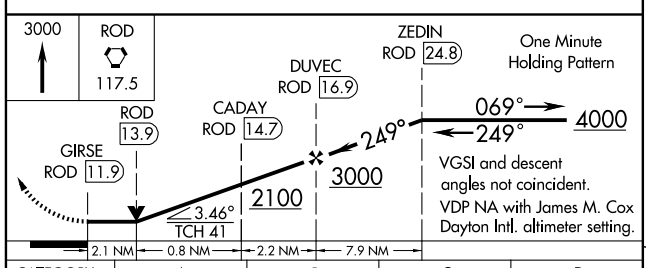
T
NA

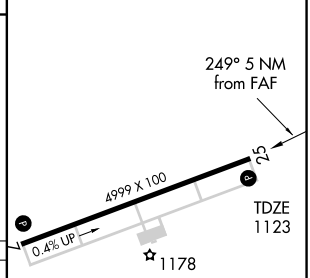
Obtain local altimeter on CTAF; when not received use James M. Cox Dayton Intl altimeter setting.

MISSED APPROACH: Climb to 3000 direct ROD VORTAC and hold.

AWOS-3	DAYTON APP CON	UNICOM
118.075	118.425 294.5	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-25	1820-1 697 (700-1)		1820-2 697 (700-2)	1820-2¼ 697 (700-2¼)
CIRCLING	1820-1 697 (700-1)		1820-2 697 (700-2)	1820-2¼ 697 (700-2¼)
JAMES M. COX DAYTON INTL. ALTIMETER SETTING MINIMUMS				
S-25	1920-1 797 (800-1)	1920-1¼ 797 (800-1¼)	1920-2¼ 797 (800-2¼)	1920-2½ 797 (800-2½)
CIRCLING	1920-1 797 (800-1)	1920-1¼ 797 (800-1¼)	1920-2¼ 797 (800-2¼)	1920-2½ 797 (800-2½)

MIRL Rwy 7-25 L
REIL Rwys 7 and 25 L

APP CRS	Rwy ldg	4126
237°	TDZE	850
	Apt Elev	851

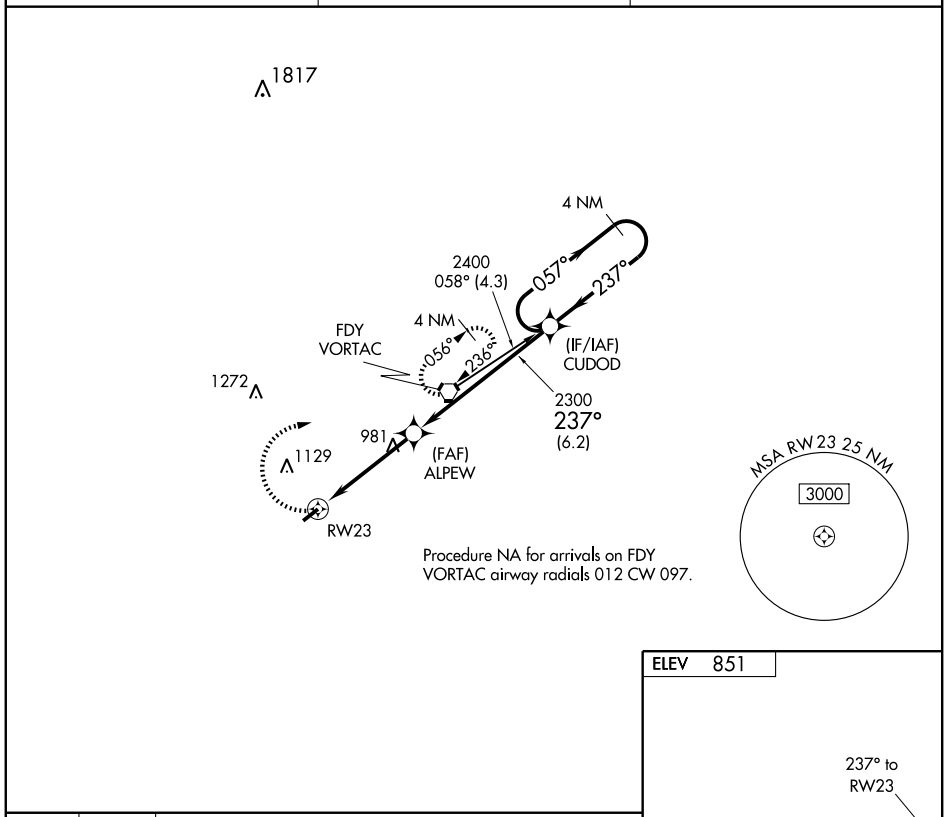
RNAV (GPS) RWY 23
BLUFFTON (5G7)

NA

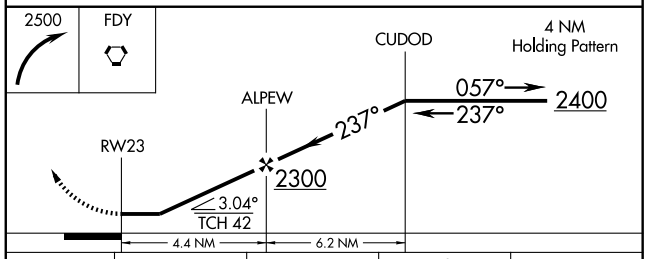
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Use Findlay altimeter setting; when not received use Lima Allen County altimeter setting and increase all MDA 20 feet and Circling Cat D visibility ¼ mile.

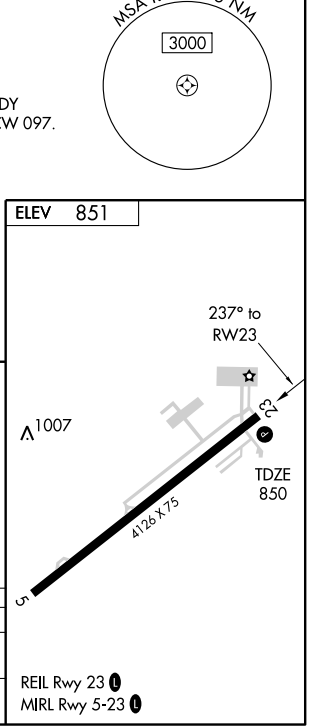
MISSED APPROACH: Climbing right turn to 2500 direct FDY VORTAC and hold.

FINDLAY ASOS	TOLEDO APP CON	UNICOM
124.425	120.8 317.55	122.8 (CTAF) L



Procedure NA for arrivals on FDY VORTAC airway radials 012 CW 097.





REIL Rwy 23 L
MIRL Rwy 5-23 L

CATEGORY	A	B	C	D
LNAV MDA	1280-1 430 (500-1)		1280-1¼ 430 (500-1¼)	1280-1½ 430 (500-1½)
CIRCLING	1340-1 489 (500-1)		1340-1½ 489 (500-1½)	1520-2 669 (700-2)

EC-2, 14 JAN 2010 to 11 FEB 2010

VORTAC FDY 108.2 Chan 19	APP CRS 233°	Rwy ldg 4126 TDZE 850 Apt Elev 851

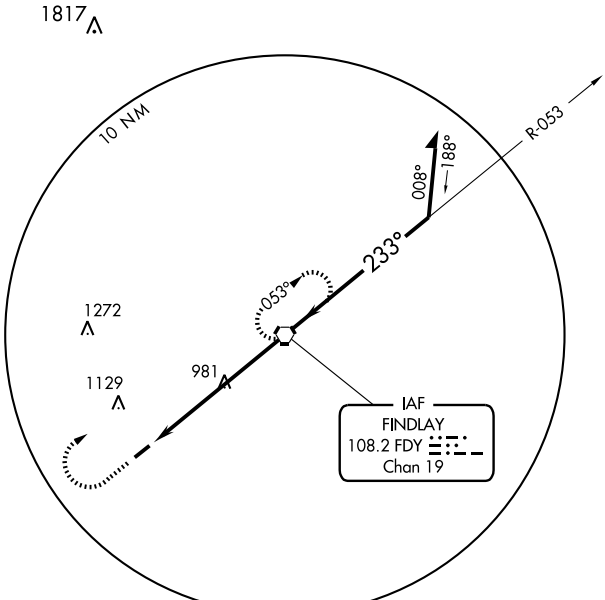
VOR RWY 23
BLUFFTON (5G7)

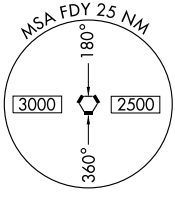
Visibility reduction by helicopters NA. Use Findlay altimeter setting; when not received, use Lima Allen County altimeter setting and increase all MDA 20 feet, and Circling Cat D visibility ¼ mile.

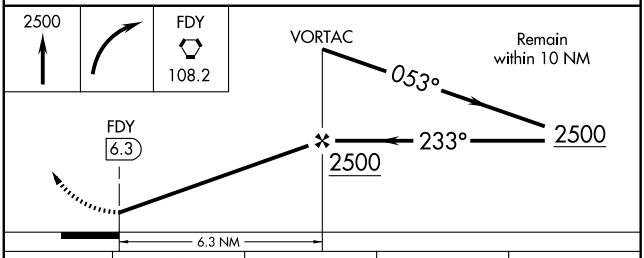
NA

MISSED APPROACH: Climb to 2500 then right turn direct FDY VORTAC and hold.

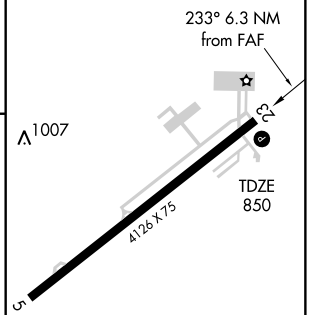
FINDLAY ASOS	TOLEDO APP CON	UNICOM
124.425	120.8 317.55	122.8 (CTAF) L







ELEV 851



REIL Rwy 23 L
MIRL Rwy 5-23 L

CATEGORY	A	B	C	D
S-23	1280-1	430 (500-1)	1280-1¼ 430 (500-1¼)	1280-1½ 430 (500-1½)
CIRCLING	1340-1	489 (500-1)	1340-1½ 489 (500-1½)	1520-2 669 (700-2)

FAF to MAP 6.3 NM

Knots	60	90	120	150	180
Min:Sec	6:18	4:12	3:09	2:31	2:06

EC-2, 14 JAN 2010 to 11 FEB 2010

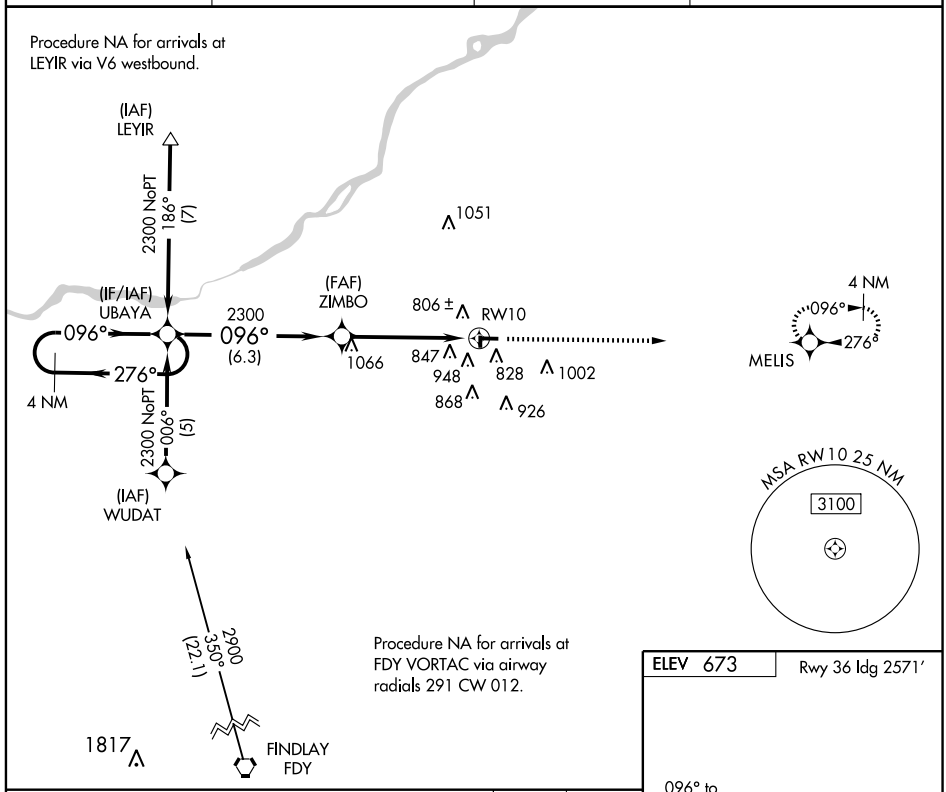
WAAS CH 62803 W10A	APP CRS 096°	Rwy ldg 4199 TDZE 673 Apt Elev 673

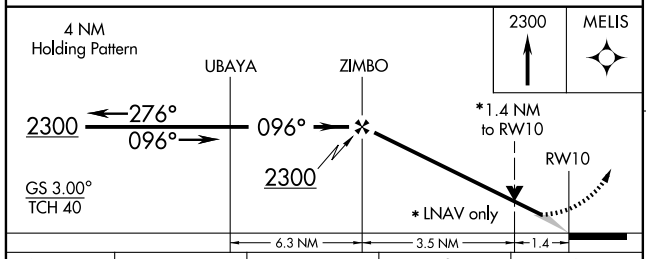
RNAV (GPS) RWY 10
BOWLING GREEN / WOOD COUNTY (1G0)

If local altimeter setting not received, use Toledo Express altimeter setting and increase all DAs 35 feet and all MDAs 40 feet.
NA
DME/DME RNP-0.3 NA. VDP NA with Toledo Express altimeter setting.

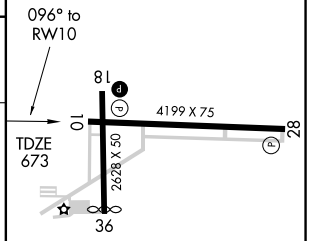
MISSED APPROACH: Climb to 2300 direct MELIS and hold.

AWOS-3	TOLEDO APP CON	CLNC DEL	UNICOM
120.725	126.1 317.55	125.6	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	926-1 253 (300-1)			
LNAV MDA	1160-1 487 (500-1)		1160-1¼ 487 (500-1¼)	1160-1½ 487 (500-1½)
CIRCLING	1300-1 627 (700-1)		1300-1¾ 627 (700-1¾)	1320-2 647 (700-2)



REIL Rwys 10, 18 and 28 L
MIRL Rwys 10-28 and 18-36 L

WAAS CH 97403 W18A	APP CRS 184°	Rwy ldg 2628 TDZE 672 Apt Elev 673

RNAV (GPS) RWY 18

BOWLING GREEN / WOOD COUNTY (1G0)

If local altimeter setting not received, use Toledo Express altimeter setting and increase all DAs 35 feet and all MDAs 40 feet. DME/DME RNP-0.3 NA.

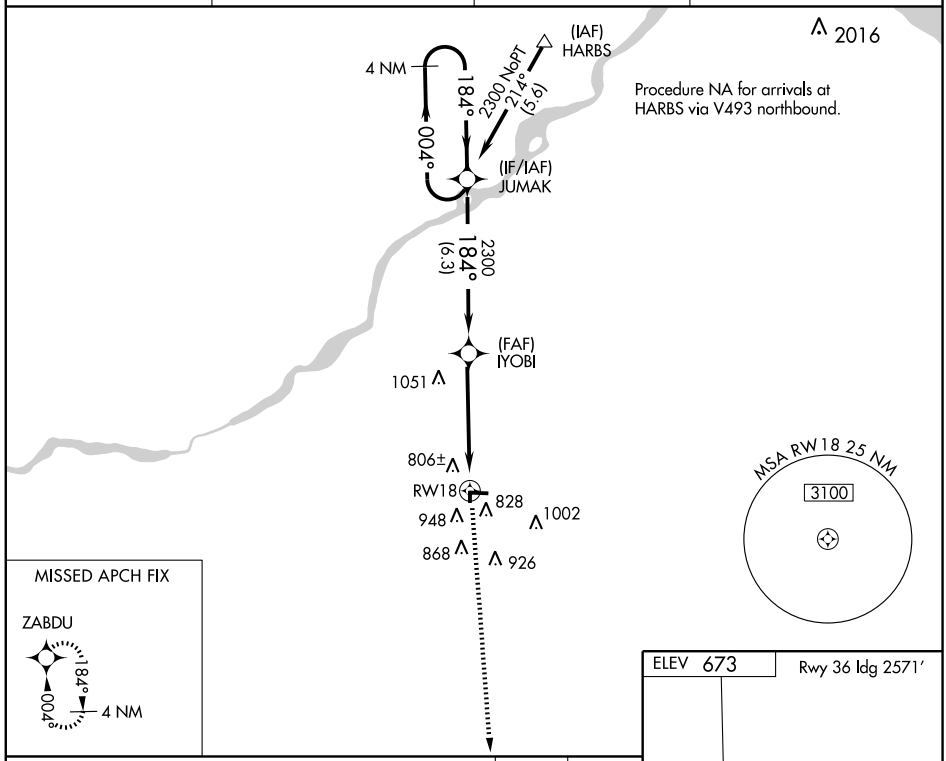
NA

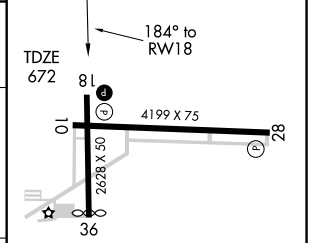
MISSED APPROACH: Climb to 2400 direct ZABDU and hold.

AWOS-3	TOLEDO APP CON	CLNC DEL	UNICOM
120.725	126.1 317.55	125.6	122.8 (CTAF) L

2016

Procedure NA for arrivals at HARBS via V493 northbound.





CATEGORY	A	B	C	D
LPV DA	922-1 250 (300-1)		NA	
LNAV MDA	1320-1 648 (700-1)		NA	
CIRCLING	1320-1 647 (700-1)		NA	

REIL Rwys 10, 18 and 28 L
MIRL Rwys 10-28 and 18-36 L

EC-2, 14 JAN 2010 to 11 FEB 2010

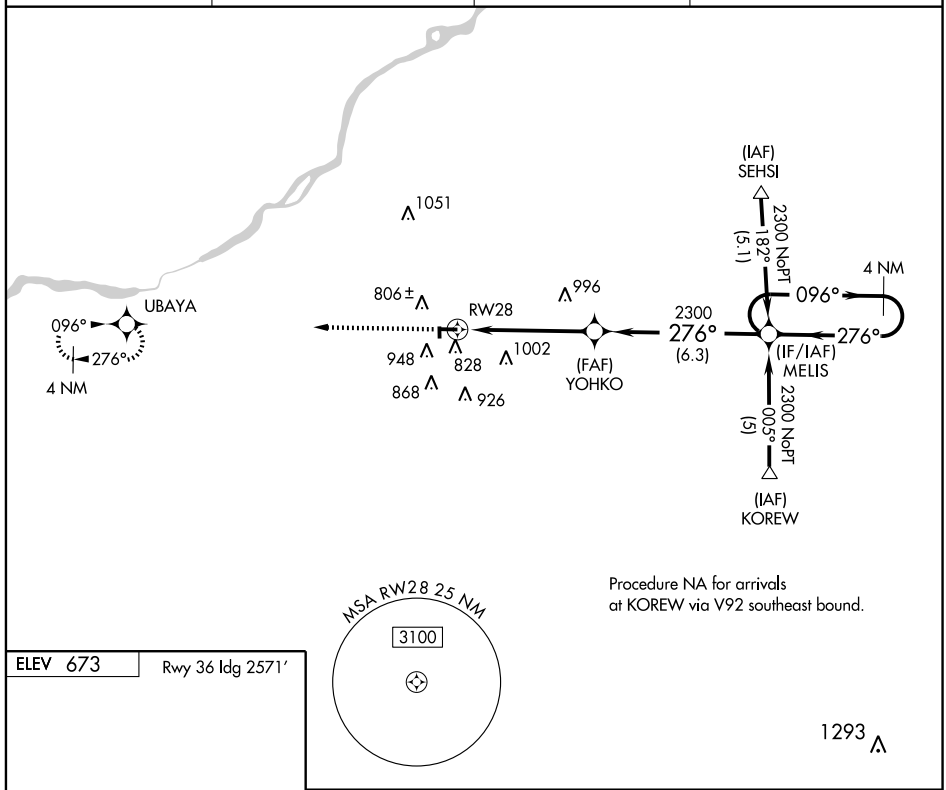
WAAS CH 82702 W28A	APP CRS 276°	Rwy ldg 4199 TDZE 673 Apt Elev 673

RNAV (GPS) RWY 28
BOWLING GREEN / WOOD COUNTY (1G0)

If local altimeter setting not received, use Toledo Express altimeter setting and increase all DAs 35 feet and all MDAs 40 feet.
NA DME/DME RNP-0.3 NA. VDP NA with Toledo Express altimeter setting.

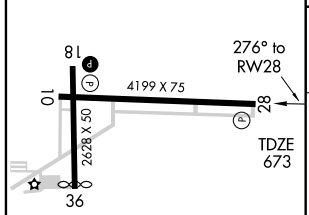
MISSED APPROACH: Climb to 2300 direct UBAYA and hold.

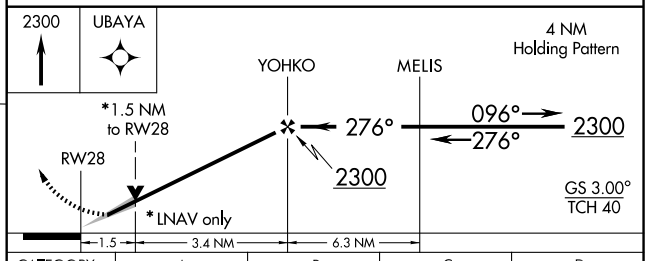
AWOS-3	TOLEDO APP CON	CLNC DEL	UNICOM
120.725	126.1 317.55	125.6	122.8 (CTAF) L



Procedure NA for arrivals at KOREW via V92 southeast bound.

ELEV 673 Rwy 36 ldg 2571'





CATEGORY	A	B	C	D
LPV DA	923-1 250 (300-1)			
LNAV MDA	1200-1 527 (600-1)		1200-1½ 527 (600-1½)	1200-1¾ 527 (600-1¾)
CIRCLING	1300-1 627 (700-1)		1300-1¾ 627 (700-1¾)	1320-2 647 (700-2)

REIL Rwys 10, 18 and 28 L
MIRL Rwys 10-28 and 18-36 L

EC-2, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	2571
004°	TDZE	672
	Apt Elev	673

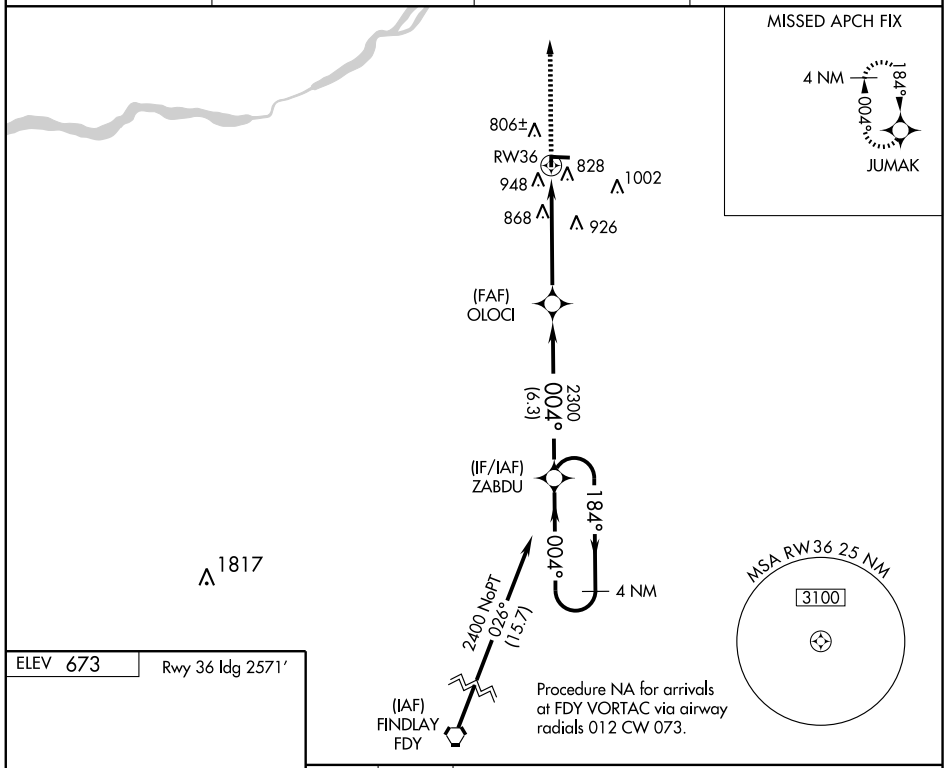
RNAV (GPS) RWY 36

BOWLING GREEN / WOOD COUNTY (1G0)

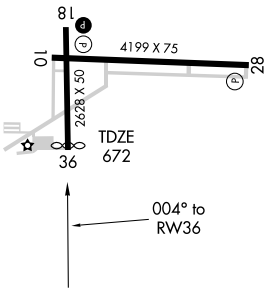
If local altimeter setting not received, use Toledo Express altimeter setting and increase all MDAs 40 feet.
NA DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 2300 direct JUMAK and hold.

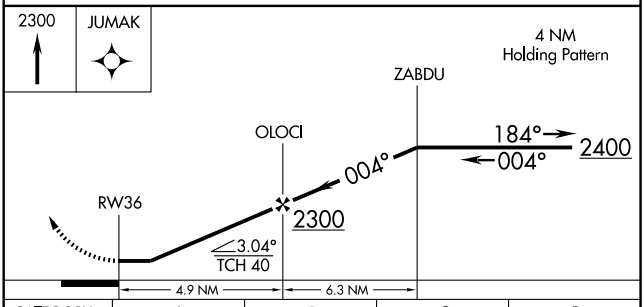
AWOS-3	TOLEDO APP CON	CLNC DEL	UNICOM
120.725	126.1 317.55	125.6	122.8 (CTAF) L



ELEV 673 Rwy 36 ldg 2571'



REIL Rwys 10, 18 and 28 L
MIRL Rwys 10-28 and 18-36 L



CATEGORY	A	B	C	D
LNAV MDA	1260-1 588 (600-1)		NA	
CIRCLING	1300-1 627 (700-1)		NA	

VOR/DME VWV 113.1 Chan 78	APP CRS 179°	Rwy ldg 2628 TDZE 672 Apt Elev 673

VOR RWY 18

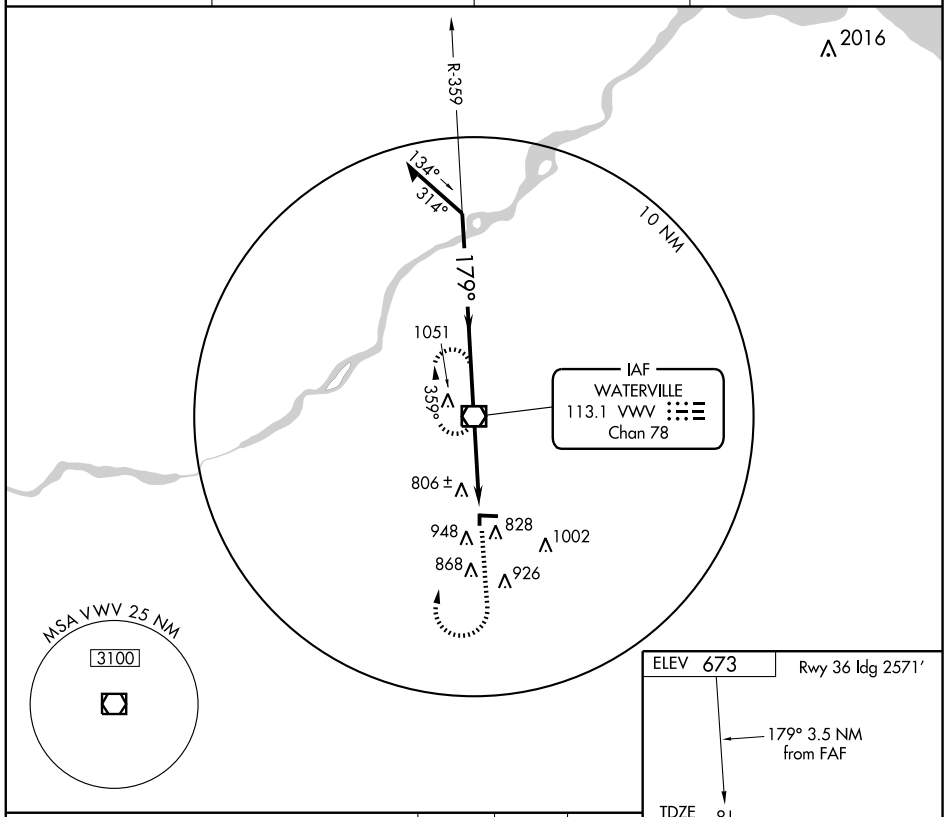
BOWLING GREEN / WOOD COUNTY (1G0)

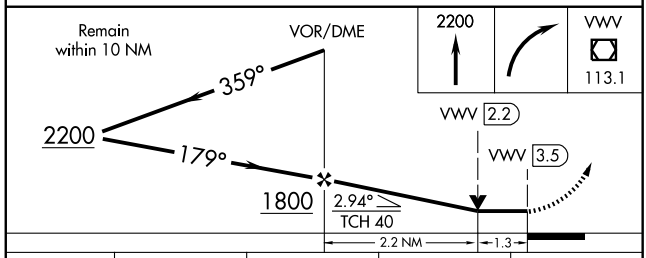
T
A NA

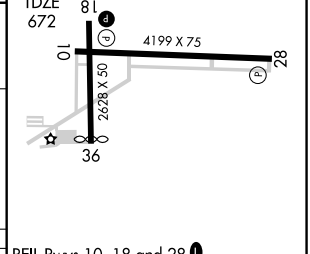
If local altimeter setting not received, use Toledo Express altimeter setting and increase all MDAs 40 feet.

MISSED APPROACH: Climb to 2200 then right turn direct VWV VOR/DME and hold.

AWOS-3	TOLEDO APP CON	CLNC DEL	UNICOM
120.725	126.1 317.55	125.6	122.8 (CTAF) L







REIL Rwys 10, 18 and 28 L
MIRL Rwys 10-28 and 18-36 L

CATEGORY	A	B	C	D
S-18	1120-1 448 (500-1)		NA	
CIRCLING	1300-1 627 (700-1)		NA	

FAF to MAP 3.5 NM					
Knots	60	90	120	150	180
Min:Sec	3:30	2:20	1:45	1:24	1:10

EC-2, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	4485
073°	TDZE	730
	Apt Elev	730

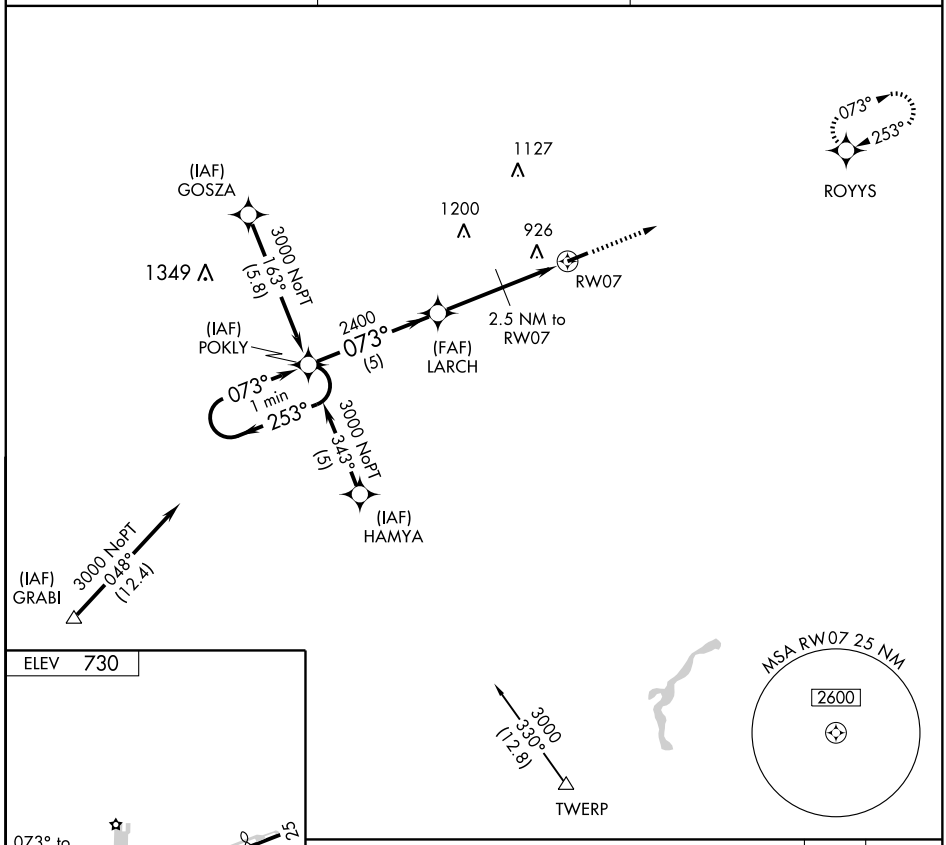
GPS RWY 7

BRYAN/ WILLIAMS COUNTY (ØG6)

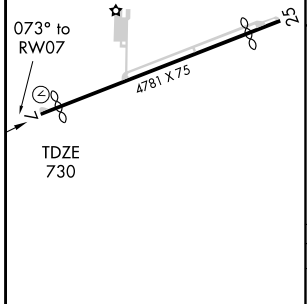
NA Use Defiance Memorial altimeter setting.

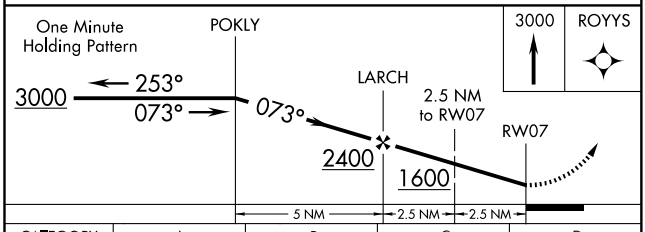
MISSED APPROACH: Climb to 3000 direct ROYYS WP and hold.

TOLEDO APP CON	UNICOM	
134.35 307.0	122.8 (CTAF)	123.0 L



ELEV 730





CATEGORY	A	B	C	D
S-7	1160-1	430 (500-1)	1160-1¼ 430 (500-1¼)	1160-1½ 430 (500-1½)
CIRCLING	1260-1	530 (600-1)	1280-1½ 550 (600-1½)	1300-2 570 (600-2)

LIRL Rwy 7-25
REIL Rwys 7 and 25 L

EC-2, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	4152
253°	TDZE	730
	Apt Elev	730

GPS RWY 25

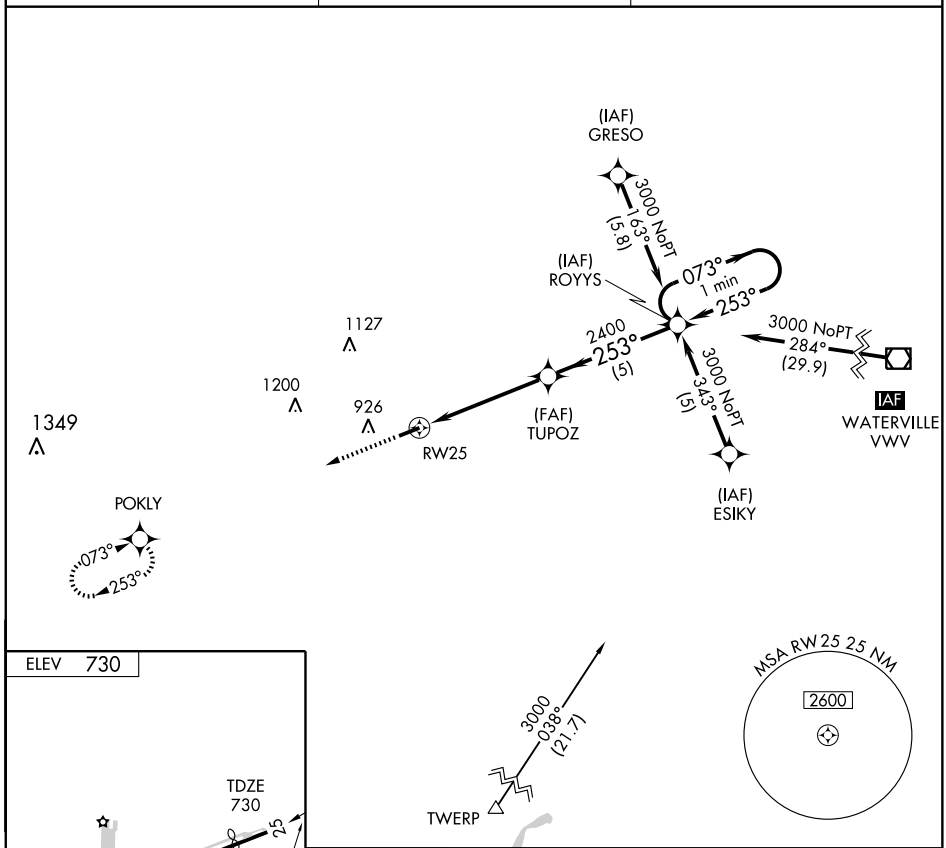
BRYAN/WILLIAMS COUNTY (ØG6)

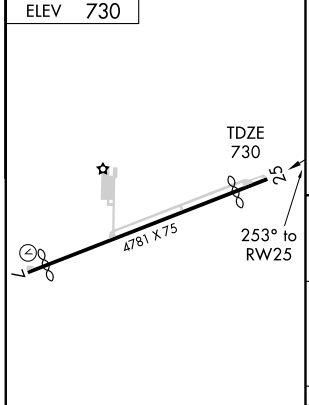
NA

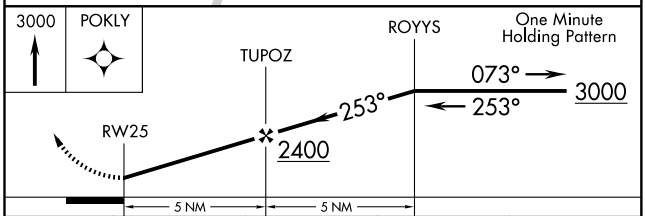
Use Defiance Memorial altimeter setting.
IAF ARM APPROACH MODE PRIOR TO IAF.

MISSED APPROACH: Climb to 3000 direct POKLY WP and hold.

TOLEDO APP CON	UNICOM	
134.35 307.0	122.8 (CTAF)	123.0 L







CATEGORY	A	B	C	D
S-25	1160-1	430 (500-1)	1160-1¼ 430 (500-1¼)	1160-1½ 430 (500-1½)
CIRCLING	1260-1	530 (600-1)	1280-1½ 550 (600-1½)	1300-2 570 (600-2)

LIRL Rwy 7-25
REIL Rwys 7 and 25 L

NDB BYN 260	APP CRS 253°	Rwy ldg N/A TDZE N/A Apt Elev 730

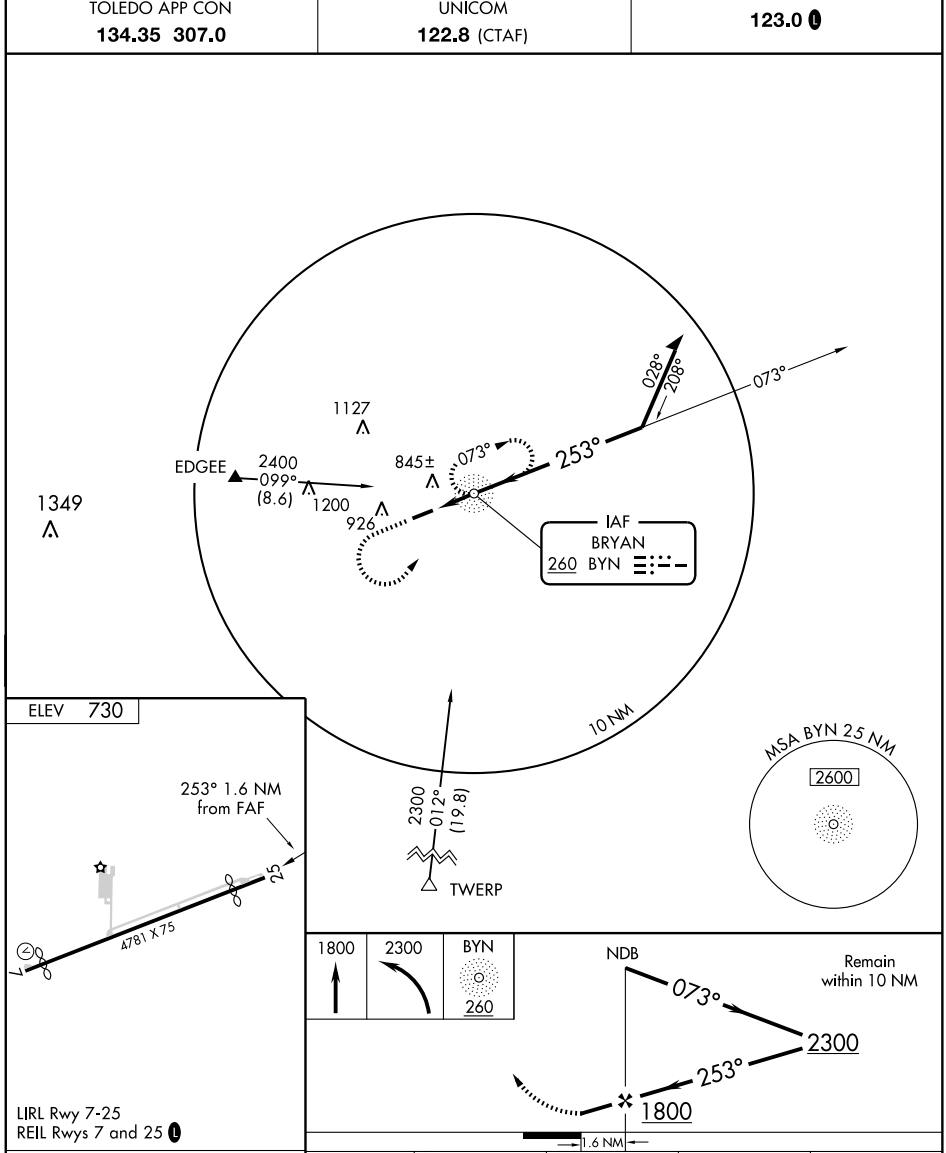
NDB-A

BRYAN/WILLIAMS COUNTY (ØG6)

NA Use Defiance Memorial altimeter setting.

MISSED APPROACH: Climb to 1800 then climbing left turn to 2300 direct BYN NDB and hold.

TOLEDO APP CON	UNICOM	
134.35 307.0	122.8 (CTAF)	123.0 L



FAF to MAP 1.6 NM					
Knots	60	90	120	150	180
Min:Sec	1:36	1:04	0:48	0:38	0:32

CATEGORY	A	B	C	D
CIRCLING	1260-1	530 (600-1)	1280-1½ 550 (600-1½)	1300-2 570 (600-2)

VOR BUD	APP CRS	Rwy ldg	3895
109.8	208°	TDZE	1008
		Apt Elev	1008

VOR or GPS RWY 22

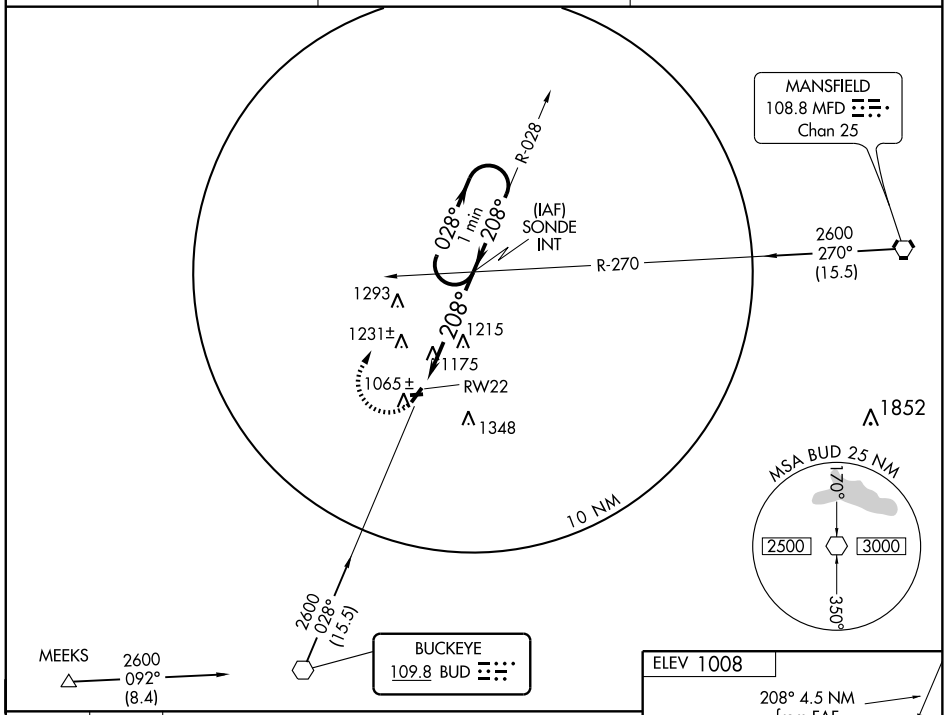
BUCYRUS / PORT BUCYRUS-CRAWFORD COUNTY (17G)

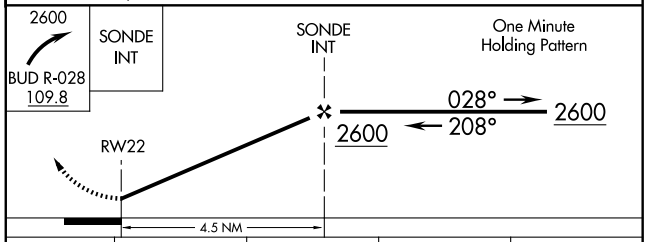
Use Mansfield altimeter setting; when not available, use Findlay altimeter setting.

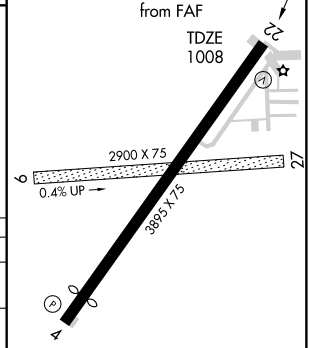
NA

MISSED APPROACH: Climbing right turn to 2600 via BUD R-028 to SONDE Int and hold.

AWOS-3	MANSFIELD APP CON ★	UNICOM
126.625	124.2 390.8	122.8 (CTAF)







MIRL Rwys 4-22

CATEGORY	A	B	C	D
S-22	1620-1 612 (700-1)		1620-1¾ 612 (700-1¾)	NA
CIRCLING	1620-1 612 (700-1)		1620-1¾ 612 (700-1¾)	NA
FINDLAY ALTIMETER SETTING MINIMUMS				
S-22	1640-1 632 (700-1)		1640-1¾ 632 (700-1¾)	NA
CIRCLING	1640-1 632 (700-1)		1640-1¾ 632 (700-1¾)	NA

FAF to MAP 4.5 NM

Knots	60	90	120	150	180
Min:Sec	4:30	3:00	2:15	1:48	1:30

EC-2, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	3277
134°	TDZE	1161
	Apt Elev	1174

GPS RWY 13

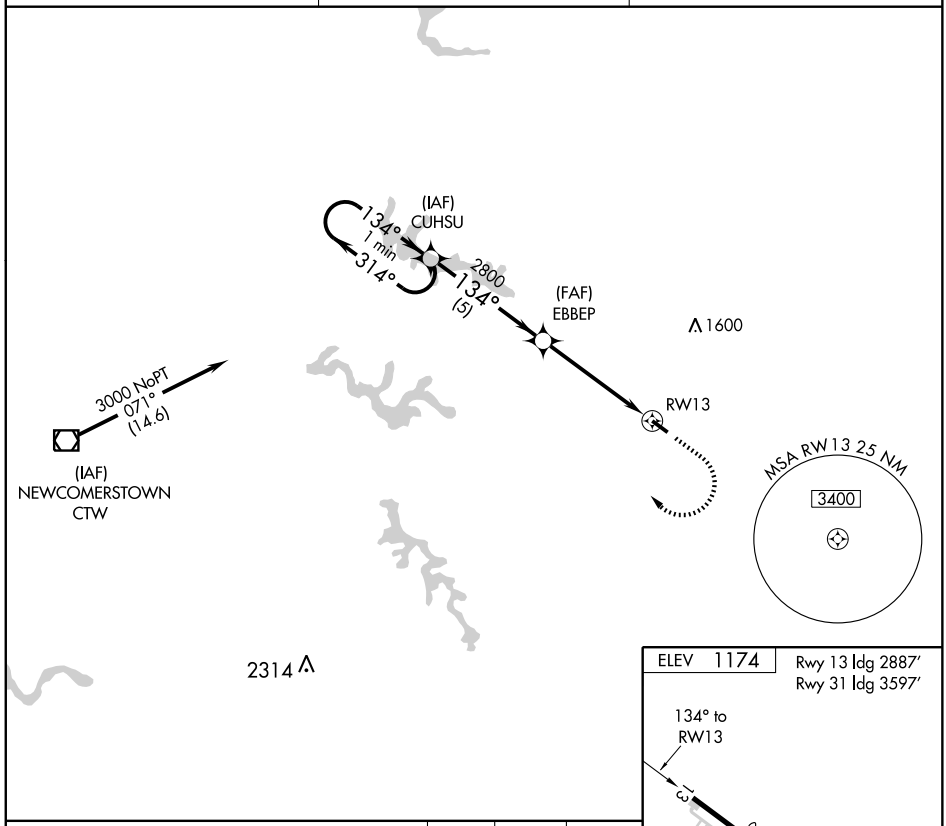
CADIZ / HARRISON COUNTY (8G6)

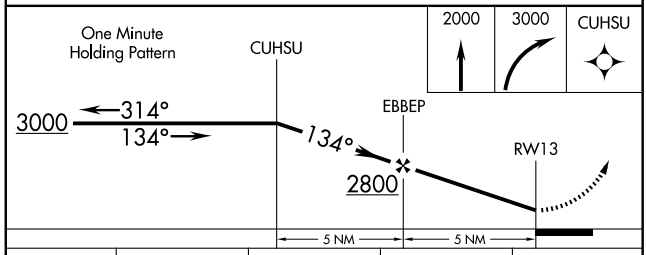
NA

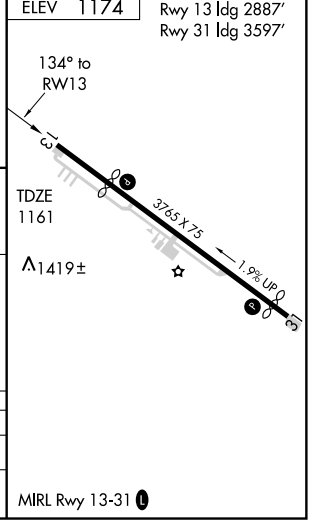
Use Wheeling, WV altimeter setting.

MISSED APPROACH: Climb to 2000 then climbing right turn to 3000 direct CUHSU WP and hold.

WHEELING ASOS	CLEVELAND CENTER	UNICOM
127.375	120.4 257.975	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-13	1720-1 559 (600-1)		NA	
CIRCLING	1780-1 606 (700-1)	1820-1 646 (700-1)	NA	

APP CRS	Rwy ldg	3933
314°	TDZE	1160
	Apt Elev	1174

GPS RWY 31

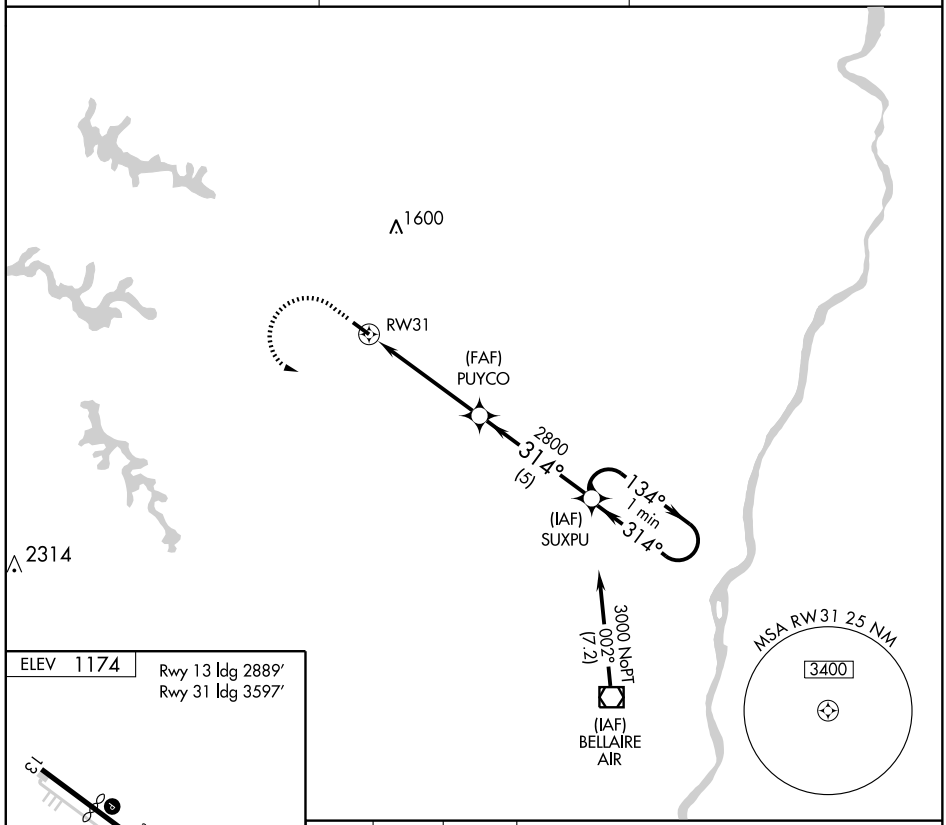
CADIZ / HARRISON COUNTY (8G6)

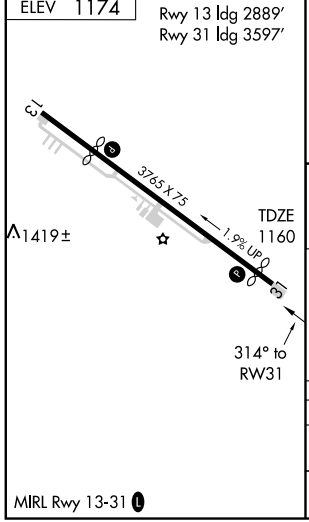
NA

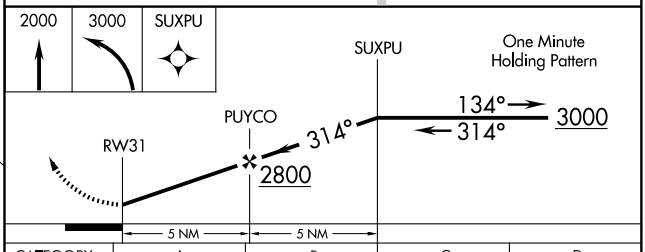
Use Wheeling, WV altimeter setting.

MISSED APPROACH: Climb to 2000, then climbing left turn to 3000 direct SUXPU WP and hold.

WHEELING ASOS	CLEVELAND CENTER	UNICOM
127.375	120.4 257.975	122.8 (CTAF)







CATEGORY	A	B	C	D
S-31	1720-1 560 (600-1)		NA	
CIRCLING	1780-1 606 (700-1)	1820-1 646 (700-1)	NA	

VOR/DME CTW	APP CRS	Rwy ldg	N/A
111.8	095°	TDZE	N/A
Chan 55		Apt Elev	1174

VOR-A

CADIZ / HARRISON COUNTY (8G6)

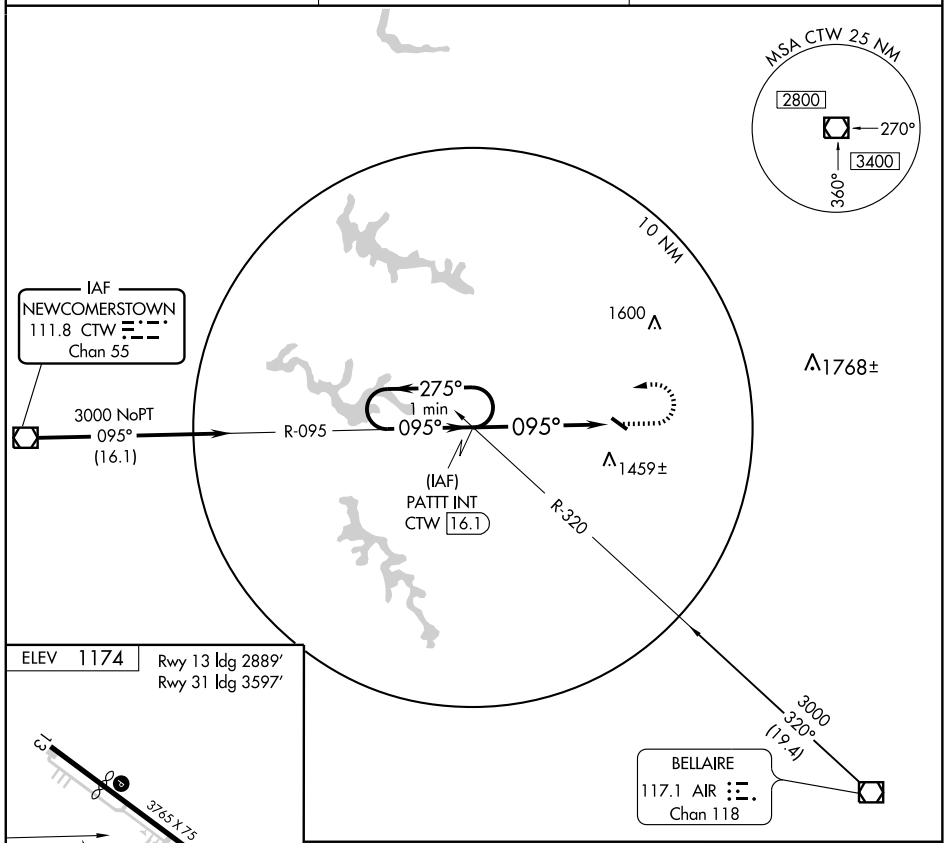
T

NA

Use Wheeling, WV altimeter setting.

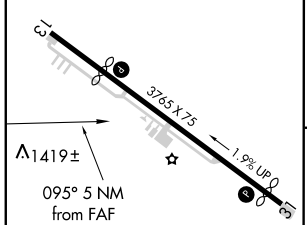
MISSED APPROACH: Climb to 2000, then climbing left turn to 3000 via CTW VOR/DME R-095 to PATTT Int/CTW 16.1 DME and hold.

WHEELING ASOS	CLEVELAND CENTER	UNICOM
127.375	120.4 257.975	122.8 (CTAF) L

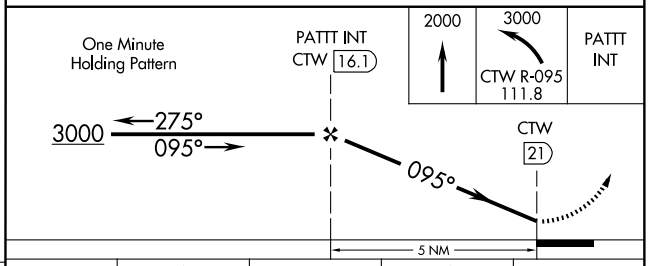


ELEV 1174

Rwy 13 ldg 2889′
Rwy 31 ldg 3597′



MIRL Rwy 13-31 L



FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

CATEGORY	A	B	C	D
CIRCLING	1780-1 606 (700-1)	1820-1¼ 646 (700-1¼)	NA	

APP CRS	Rwy ldg	3398
228°	TDZE	878
	Apt Elev	880

GPS RWY 23

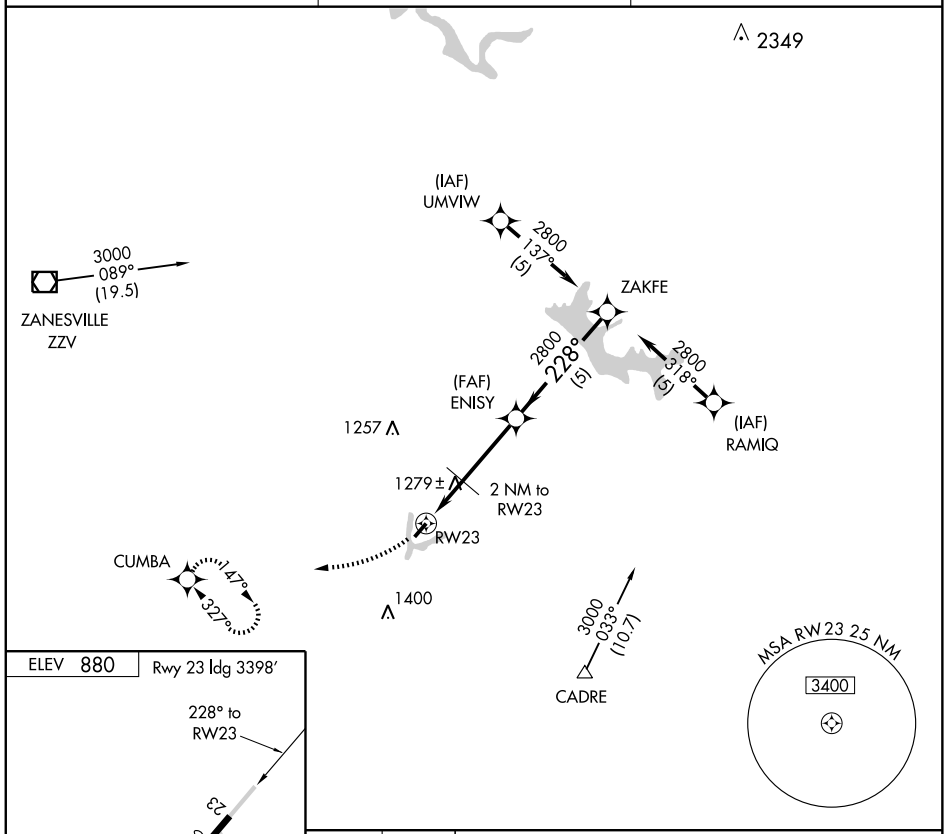
CALDWELL/ NOBLE COUNTY (I1Ø)

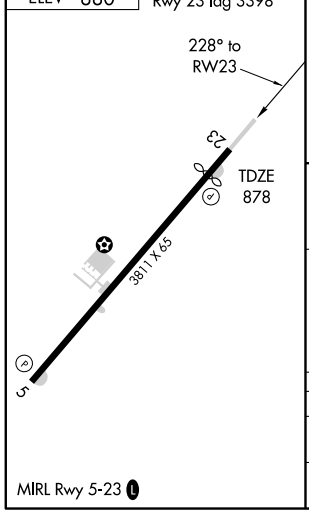
NA

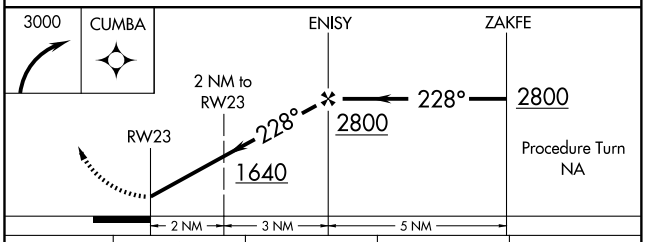
Use Zanesville altimeter setting.

MISSED APPROACH: Climbing right turn to 3000 direct to CUMBA WP and hold.

INDIANAPOLIS CENTER	UNICOM	
124.45 370.9	122.8 (CTAF)	122.7 L







CATEGORY	A	B	C	D
S-23	1580-1 702 (700-1)		1580-2 702 (700-2)	NA
CIRCLING	1620-1 740 (800-1)		1640-2¼ 760 (800-2¼)	NA

CALDWELL, OHIO

AL-6959 (FAA)

VOR/DME ZZV 111.4 Chan 51	APP CRS 123°	Rwy ldg N/A TDZE N/A Apt Elev 880

VOR or GPS-A

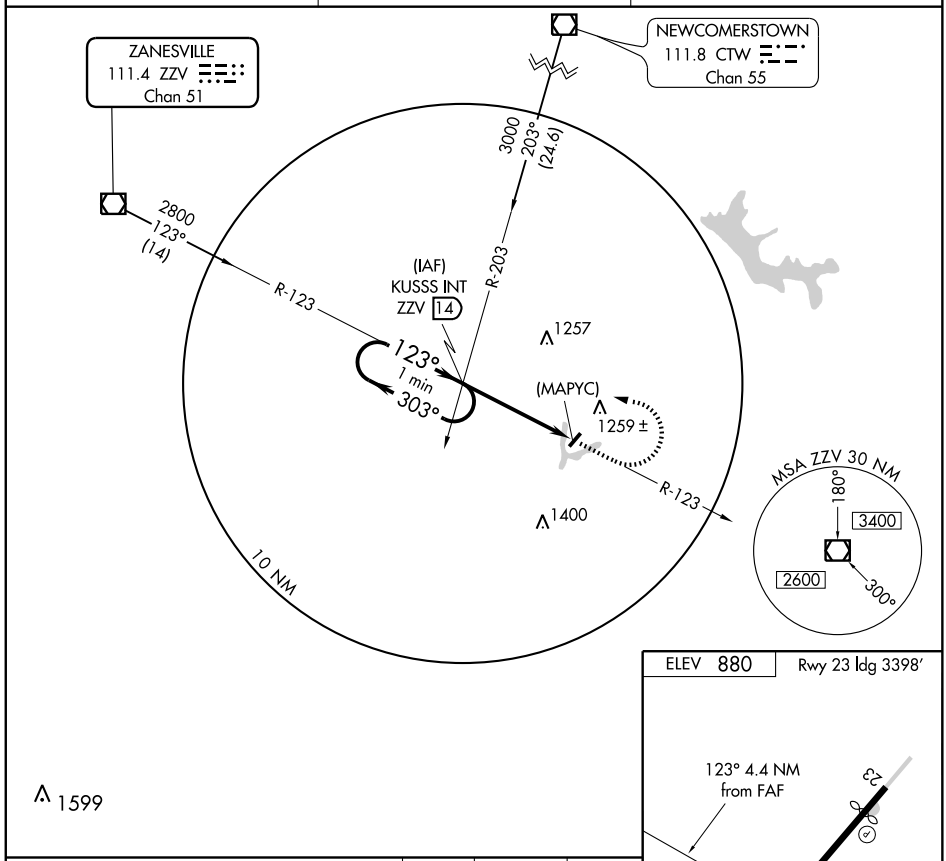
CALDWELL/ NOBLE COUNTY (I1Ø)

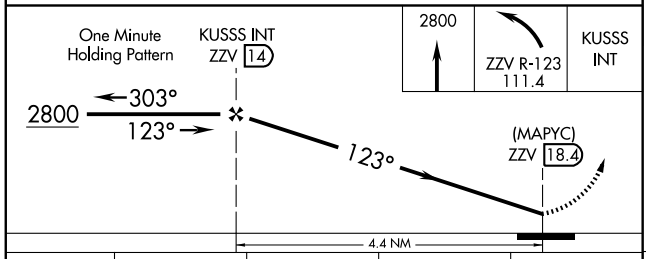
NA

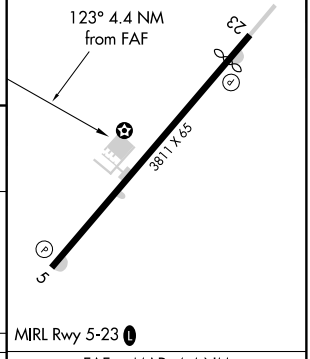
Use Zanesville altimeter setting.

MISSED APPROACH: Climb to 2800 then left turn via ZZV R-123 to KUSSS Int/ZZV 14 DME and hold.

INDIANAPOLIS CENTER	UNICOM	
124.45 370.9	122.8 (CTAF)	122.7 L







CATEGORY	A	B	C	D
CIRCLING	1620-1 740 (800-1)		1640-2 ¼ 760 (800-2 ¼)	NA

FAF to MAP 4.4 NM					
Knots	60	90	120	150	180
Min:Sec	4:24	2:56	2:12	1:46	1:28

EC-2, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-CZM	APP CRS	Rwy ldg 4298
109.35	220°	TDZE 799
Chan 30 (Y)		Apt Elev 799

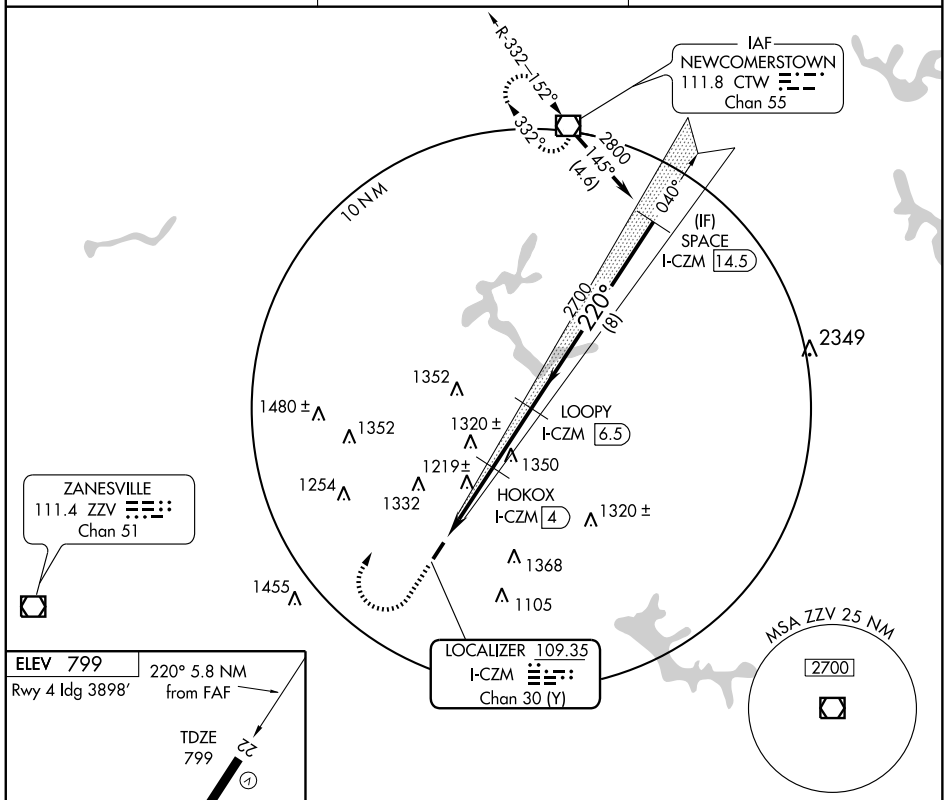
LOC/DME RWY 22
CAMBRIDGE MUNI (CDI)

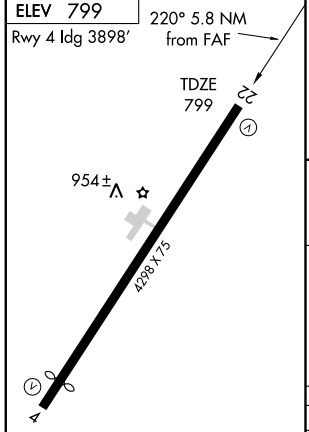
Visibility reduction by helicopters NA.
When local altimeter setting not received, use Zanesville altimeter setting and increase all MDAs 40 feet.

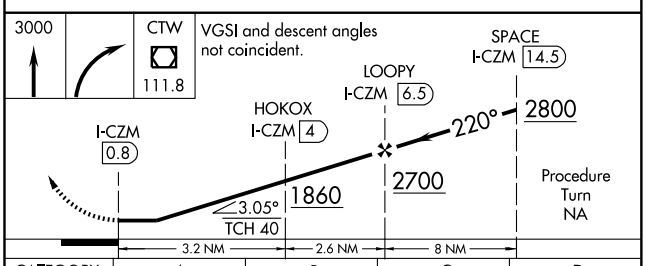
NA

MISSED APPROACH: Climb to 3000 then right turn direct CTW VOR/DME and hold.

AWOS-3	CLEVELAND CENTER	UNICOM
118.525	120.4 257.975	123.075 (CTAF) L







CATEGORY	A	B	C	D
S-22	1480-1 681 (700-1)		1480-2 681 (700-2)	NA
CIRCLING	1540-1 741 (800-1)	1540-1¼ 741 (800-1¼)	1560-2¼ 761 (800-2¼)	NA

MIRL Rwy 4-22 L
REIL Rwys 4 and 22 L

EC-2, 14 JAN 2010 to 11 FEB 2010

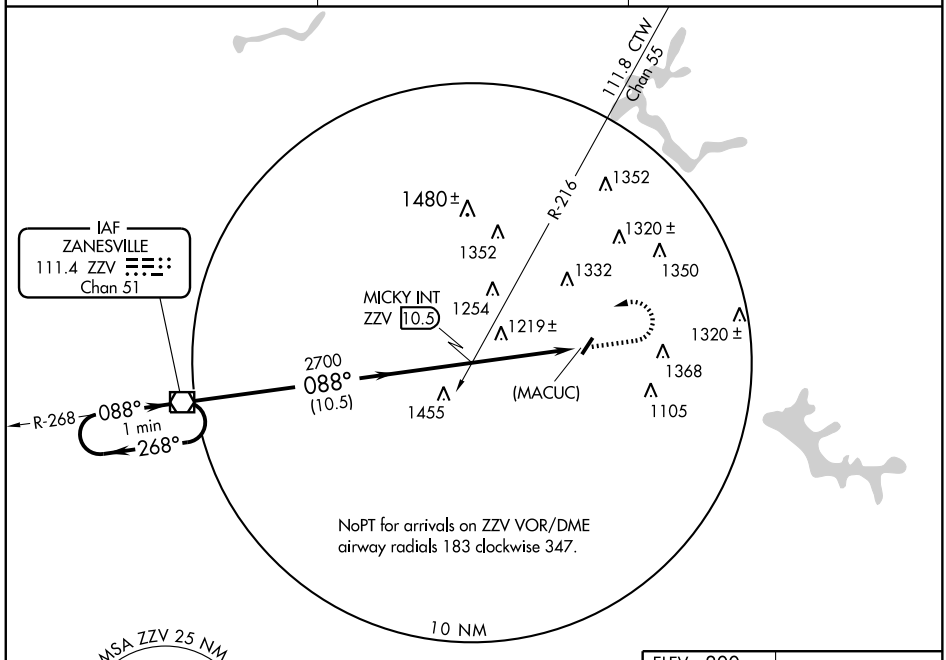
VOR/DME ZZV	APP CRS	Rwy ldg	N/A
111.4	088°	TDZE	N/A
Chan 51		Apt Elev	800

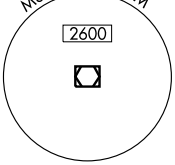
VOR or GPS-A
CAMBRIDGE MUNI (CDI)

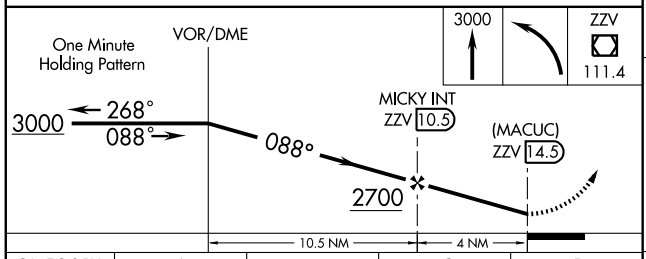
NA

MISSED APPROACH: Climb to 3000, then left turn direct ZZV VOR/DME and hold.

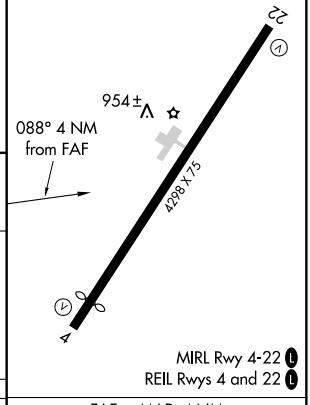
AWOS-3	INDIANAPOLIS CENTER	UNICOM
118.525	124.45 370.9	123.075 (CTAF) L







ELEV 800 Rwy 4 ldg 3898′



MIRL Rwy 4-22 L
REIL Rwys 4 and 22 L

CATEGORY	A	B	C	D
CIRCLING	1480-1 680 (700-1)		1500-2 700 (700-2)	NA

FAF to MAP 4 NM					
Knots	60	90	120	150	180
Min:Sec	4:00	2:40	2:00	1:36	1:20

EC-2, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	4300
071°	TDZE	1163
	Apt Elev	1163

GPS RWY 7

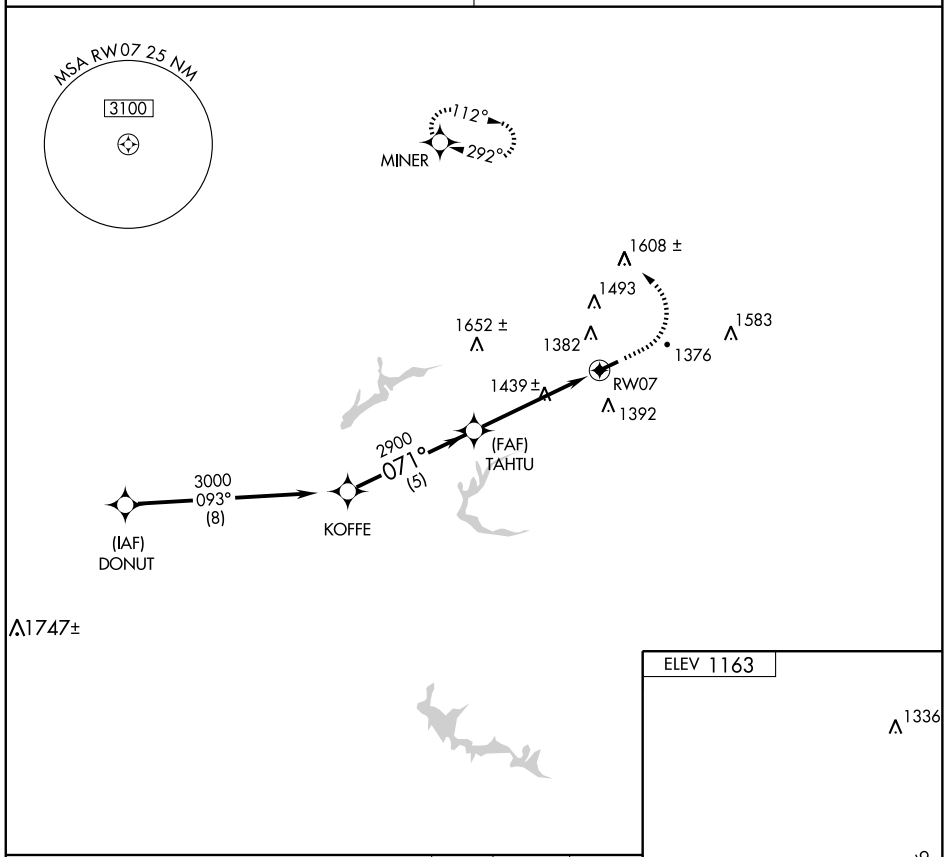
CARROLLTON/ CARROLL COUNTY-TOLSON (TSO)

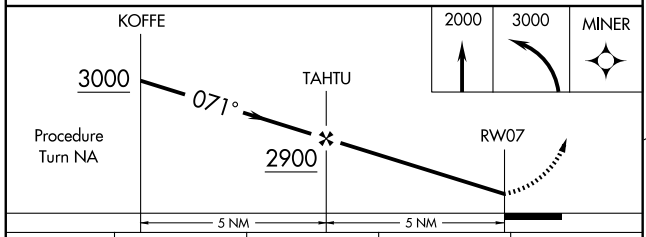
NA

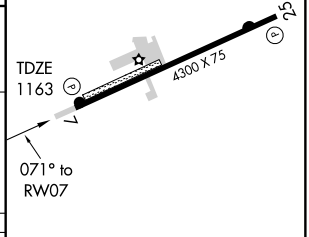
Use Akron-Canton altimeter setting.

MISSED APPROACH: Climb to 2000, then climbing left turn to 3000 direct MINER WP and hold.

AKRON-CANTON APP CON ★	UNICOM
125.5 371.875	**122.7** (CTAF) L







CATEGORY	A	B	C	D
S-7	1780-1	617 (700-1)	NA	
CIRCLING	1880-1 717 (800-1)	1900-1 737 (800-1)	NA	

REIL Rwys 7 and 25 L
MIRL Rwy 7-25 L

EC-2. 14 JAN 2010 to 11 FEB 2010

VOR/DME BSV 112.4 Chan 71	APP CRS 127°	Rwy ldg N/A TDZE N/A Apt Elev 1163

VOR or GPS-A

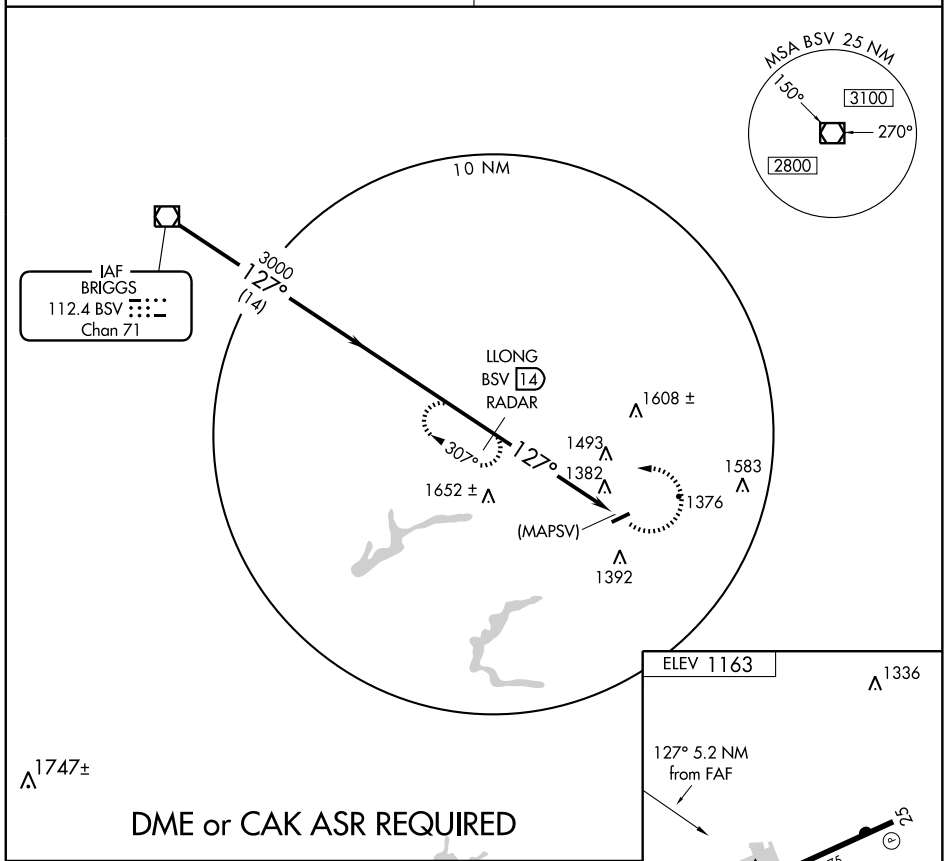
CARROLLTON/ CARROLL COUNTY-TOLSON (TSO)

NA

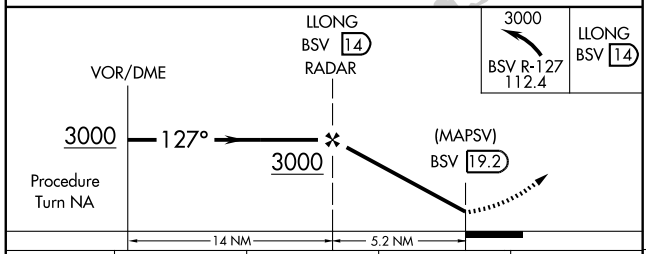
Use Akron-Canton altimeter setting.

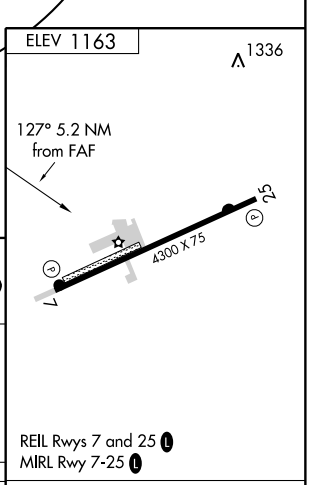
MISSED APPROACH: Climbing left turn to 3000 via BSV R-127 to LLONG/BSV 14 DME/RADAR and hold.

AKRON-CANTON APP CON ★	UNICOM
125.5 371.875	122.7 (CTAF) L



DME or CAK ASR REQUIRED





CATEGORY	A	B	C	D
CIRCLING	1940-1 777 (800-1)	1940-1¼ 777 (800-1¼)	NA	

FAF to MAP 5.2 NM					
Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44

EC-2. 14 JAN 2010 to 11 FEB 2010

NDB CQA	APP CRS	Rwy ldg	4400
205	100°	TDZE	892
		Apt Elev	892

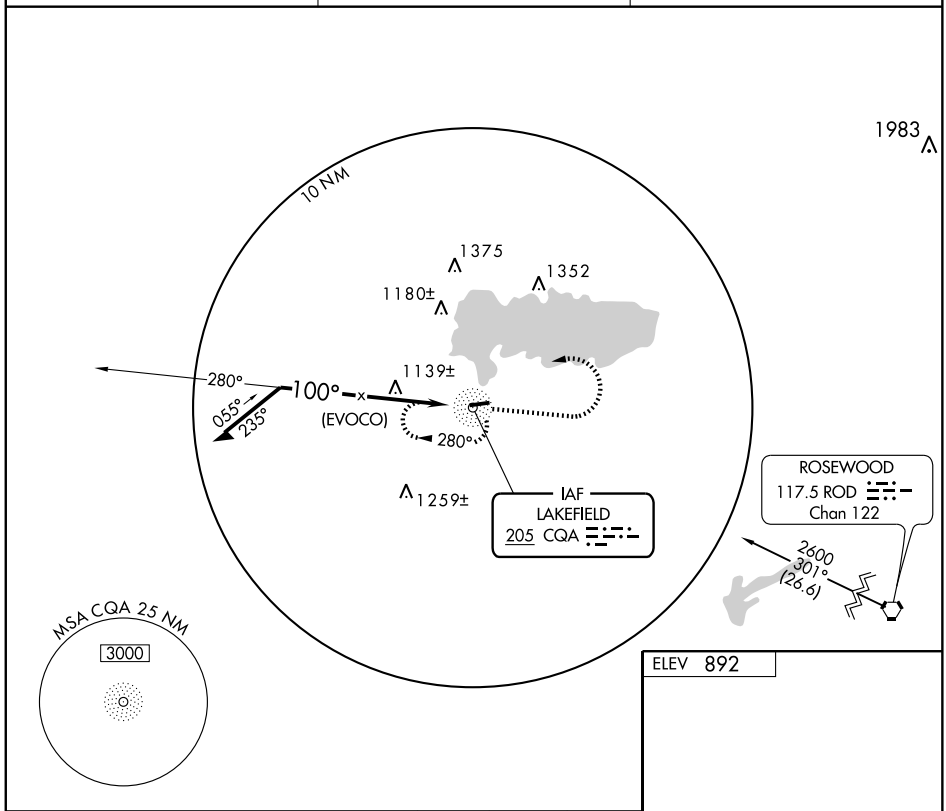
NDB or GPS RWY 8
CELINA/LAKEFIELD (CQA)

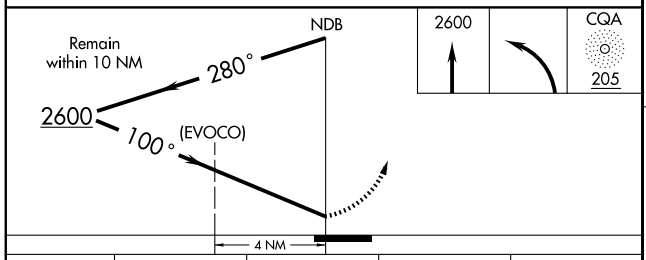
Use Dayton Intl altimeter setting.

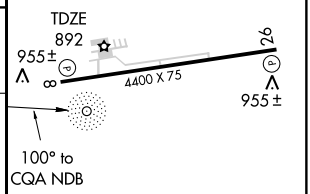
NA

MISSED APPROACH: Climb to 2600 then left turn direct CQA NDB and hold.

DAYTON APP CON	UNICOM	
134.45 352.05	122.8 (CTAF)	123.3 L







CATEGORY	A	B	C	D
S-8	1600-1	708 (800-1)	1600-2 708 (800-2)	NA
CIRCLING	1600-1	708 (800-1)	1600-2 708 (800-2)	NA

REIL Rwys 8 and 26 L
MIRL Rwy 8-26 L

VORTAC ROD	APP CRS	Rwy ldg	4400
117.5	268°	TDZE	892
Chan 122		Apt Elev	892

VOR/DME RNAV or GPS RWY 26

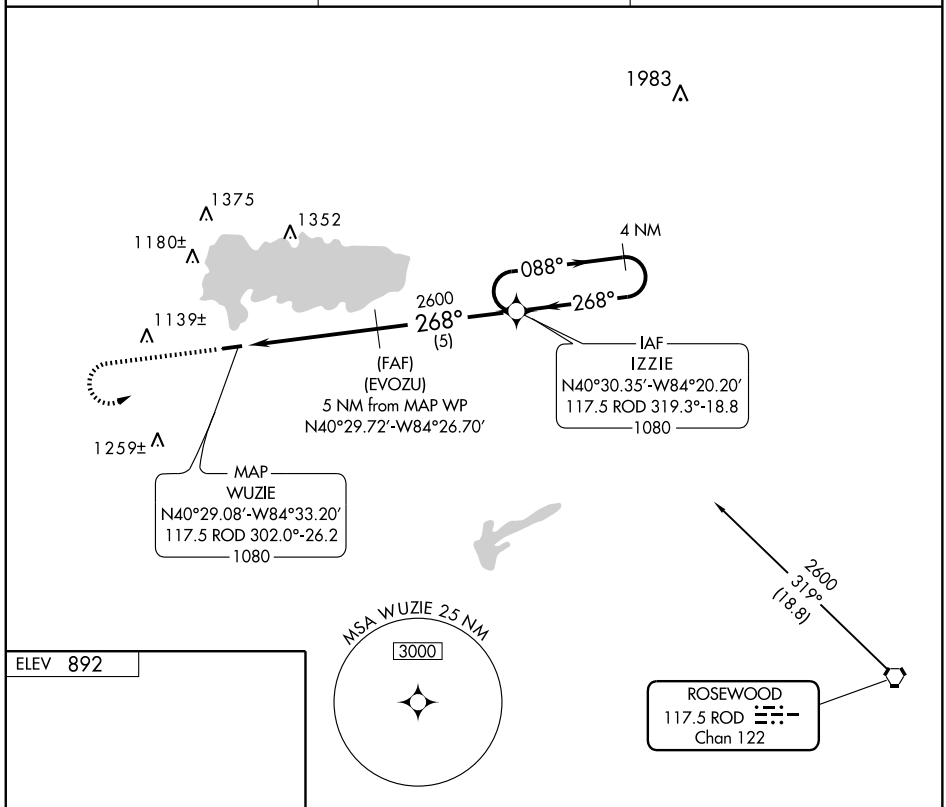
CELINA/LAKEFIELD (CQA)

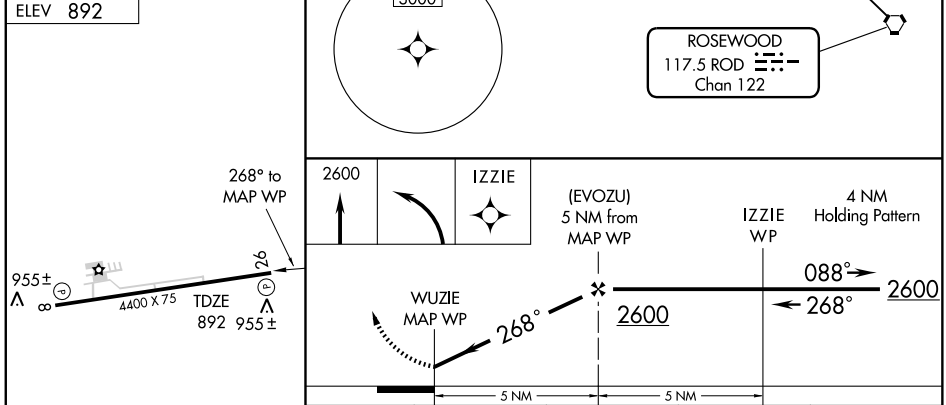
Use Dayton Intl altimeter setting.

NA

MISSED APPROACH: Climb to 2600 then left turn direct IZZIE WP and hold.

DAYTON APP CON	UNICOM	
134.45 352.05	122.8 (CTAF)	123.3 L





CATEGORY	A	B	C	D
S-26	1400-1 508 (600-1)	1400-1¼ 508 (600-1¼)	1400-1½ 508 (600-1½)	NA
CIRCLING	1440-1 548 (600-1)	1440-1¼ 548 (600-1¼)	1440-1½ 548 (600-1½)	NA

REIL Rwys 8 and 26 L
MIRL Rwy 8-26 L

EC-2, 14 JAN 2010 to 11 FEB 2010

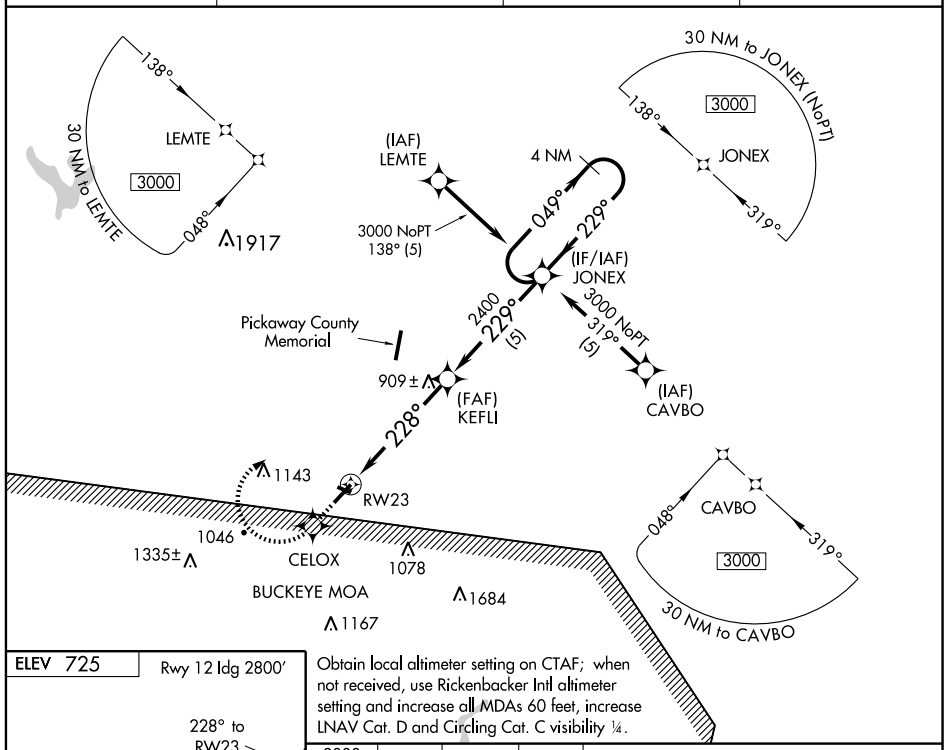
APP CRS	Rwy ldg	5400
228°	TDZE	716
	Apt Elev	725

RNAV (GPS) RWY 23
CHILLICOTHE / ROSS COUNTY (RZT)

Baro-VNAV and VDP NA with Rickenbacker Intl altimeter setting.
Baro-VNAV NA below -16°C (3°F)
NA
GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 3000 via 229° course to CELOX WP, then right turn via 048° course to JONEX WP and hold.

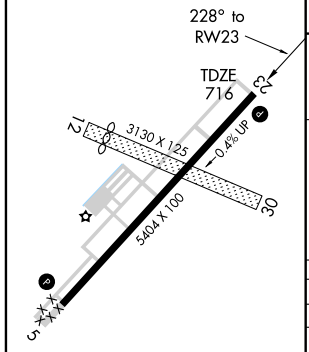
AWOS-3	COLUMBUS APP CON	UNICOM	
119.225	132.3 317.775	122.8 (CTAF)	123.0 L

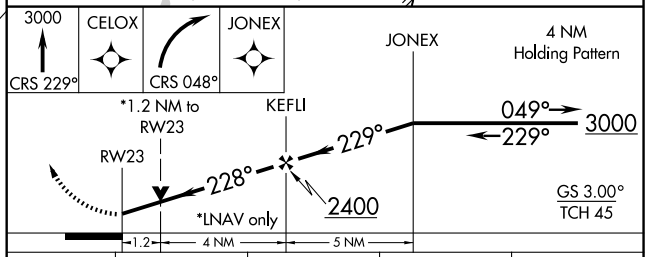


ELEV 725

Rwy 12 ldg 2800′

Obtain local altimeter setting on CTAF; when not received, use Rickenbacker Intl altimeter setting and increase all MDAs 60 feet, increase LNAV Cat. D and Circling Cat. C visibility ¼.





CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	1040-1¼ 324 (400-1¼)			
LNAV MDA	1120-1 404 (500-1)		1120-1¼ 404 (500-1¼)	
CIRCLING	1320-1¼ 595 (600-1¼)	1340-1¼ 615 (700-1¼)	1380-1¾ 655 (700-1¾)	1400-2¼ 675 (700-2¼)

REIL Rwys 5 and 23 L
MIRL Rwy 5-23 L

EC-2, 14 JAN 2010 to 11 FEB 2010

VOR XUB	APP CRS	Rwy ldg	5400
112.5	204°	TDZE	716
		Apt Elev	725

VOR RWY 23

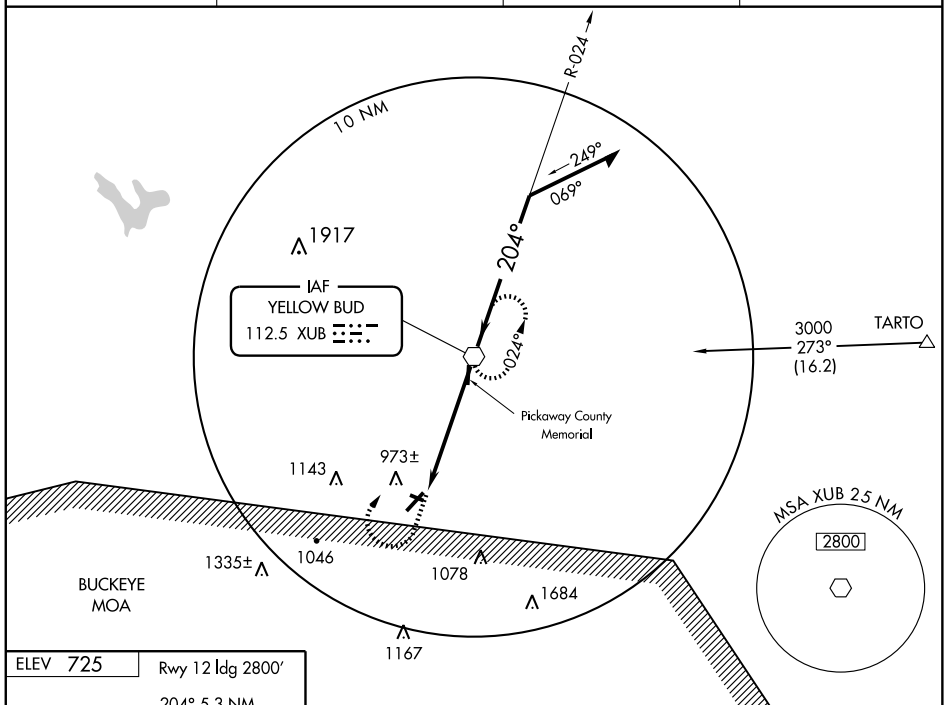
CHILLICOTHE / ROSS COUNTY (RZT)

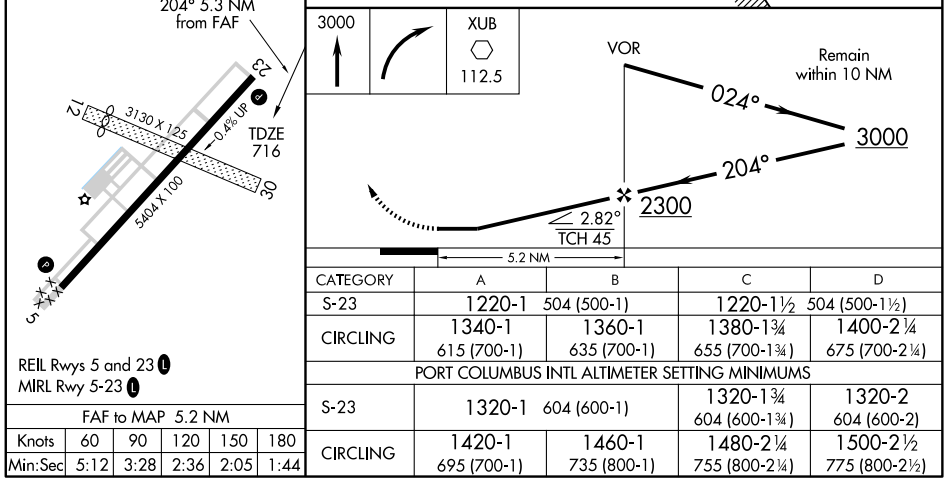
Obtain local altimeter setting on CTAF; when not received, use Port Columbus Intl altimeter setting. Circling NA to Rwys 12 and 30.

NA

MISSED APPROACH: Climb to 3000 then right turn direct XUB VOR and hold.

AWOS-3	COLUMBUS APP CON	UNICOM	
119.225	132.3 317.775	122.8 (CTAF)	123.0 L





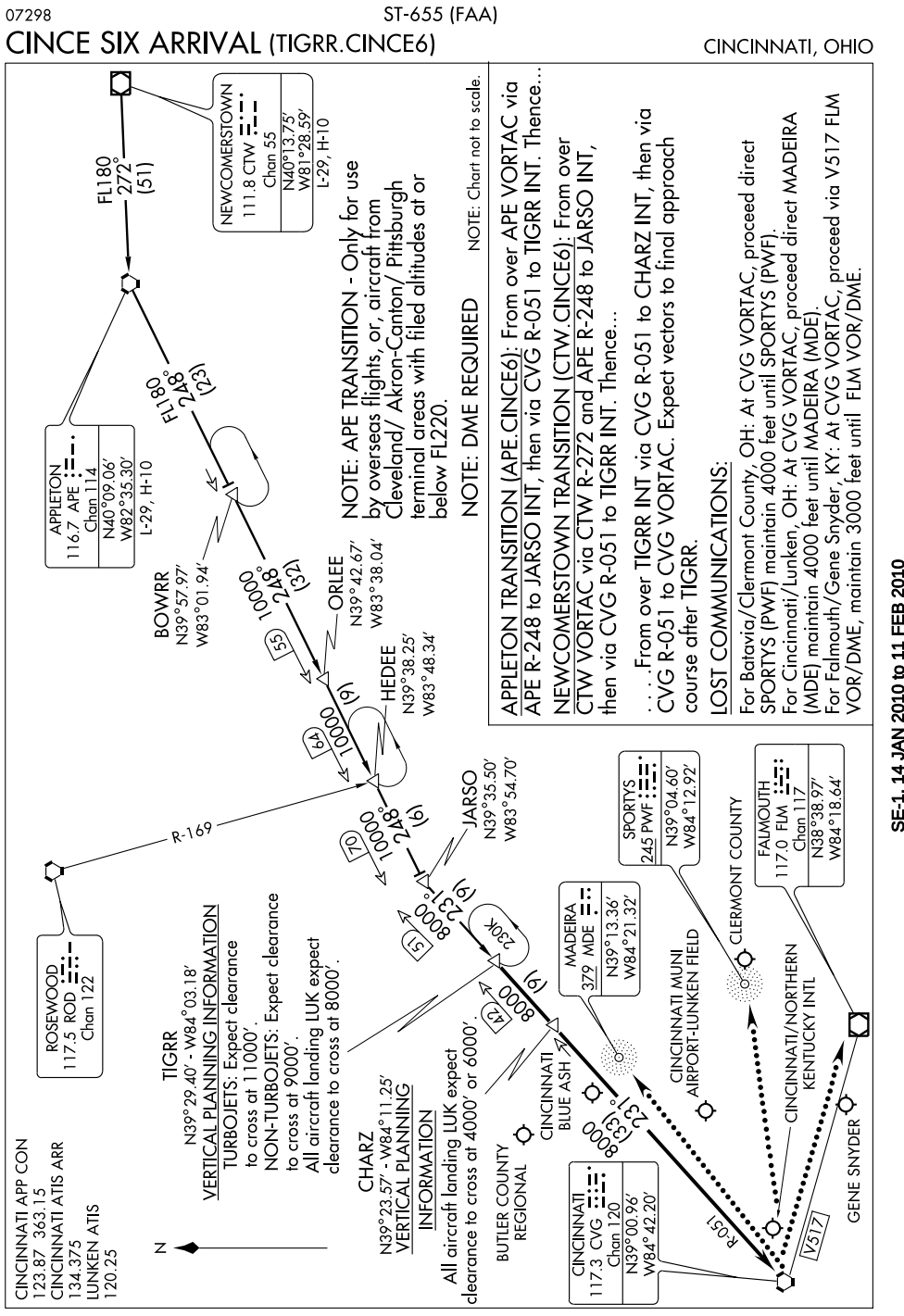
FAF to MAP 5.2 NM					
Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44

CATEGORY	A	B	C	D
S-23	1220-1 504 (500-1)		1220-1½ 504 (500-1½)	
CIRCLING	1340-1 615 (700-1)	1360-1 635 (700-1)	1380-1¾ 655 (700-1¾)	1400-2¼ 675 (700-2¼)
PORT COLUMBUS INTL ALTIMETER SETTING MINIMUMS				
S-23	1320-1 604 (600-1)		1320-1¾ 604 (600-1¾)	1320-2 604 (600-2)
CIRCLING	1420-1 695 (700-1)	1460-1 735 (800-1)	1480-2¼ 755 (800-2¼)	1500-2½ 775 (800-2½)

EC-2, 14 JAN 2010 to 11 FEB 2010

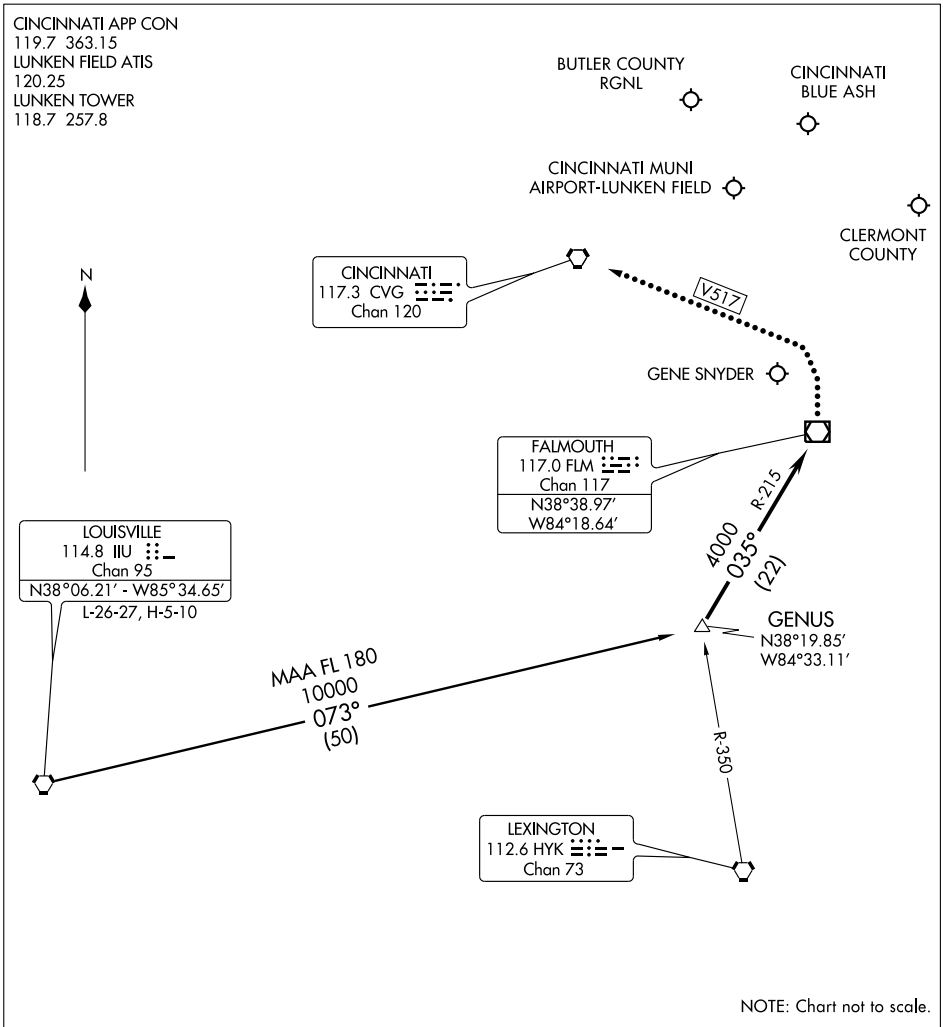
CINCE SIX ARRIVAL (TIGRR.CINCE6)

CINCINNATI, OHIO



GENUS ONE ARRIVAL

CINCINNATI, OHIO



ARRIVAL ROUTE DESCRIPTION

LOUISVILLE TRANSITION (IIU.GENUS1): From over IIU VORTAC via IIU R-073 to GENUS INT. Thence . . . .

. . . . From over GENUS INT via FLM R-215 (MEA 4000) to FLM VOR/DME. Expect radar vectors to final approach course after FLM VOR/DME.

LOST COMMUNICATIONS

BUTLER COUNTY RGNL: In the event of lost communications, at FLM VOR/DME proceed V517 to CVG VORTAC. Maintain 3000 MSL until CVG VORTAC.

EC-2, 14 JAN 2010 to 11 FEB 2010

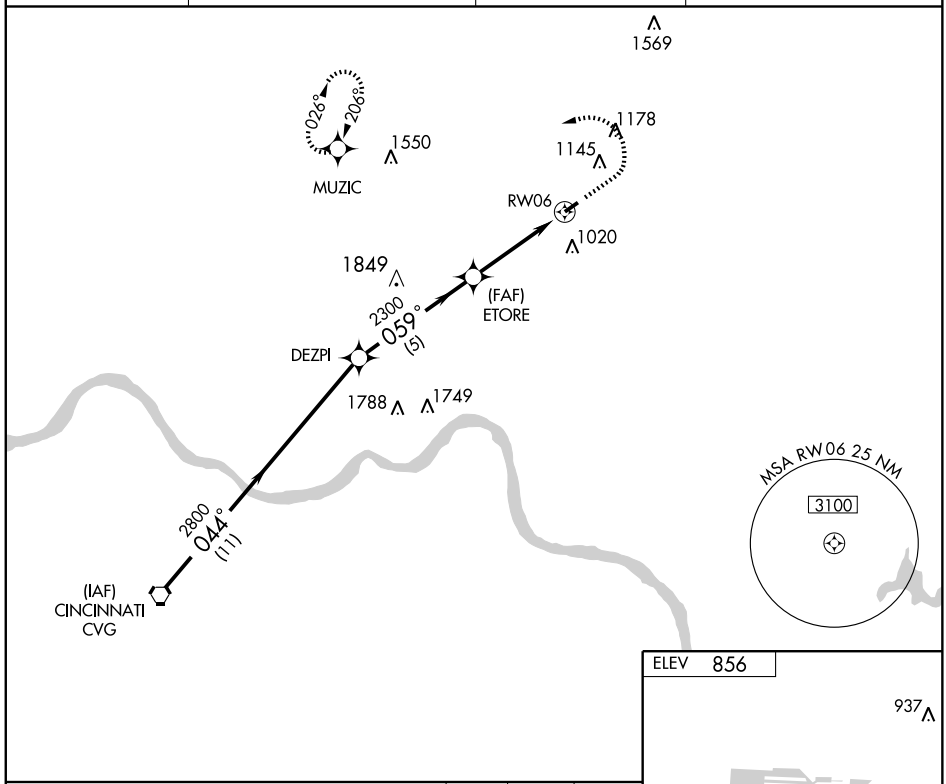
APP CRS	Rwy ldg	3500
059°	TDZE	856
	Apt Elev	856

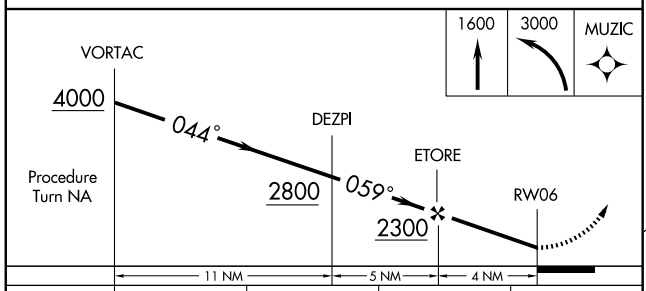
GPS RWY 6
CINCINNATI-BLUE ASH (ISZ)

NA

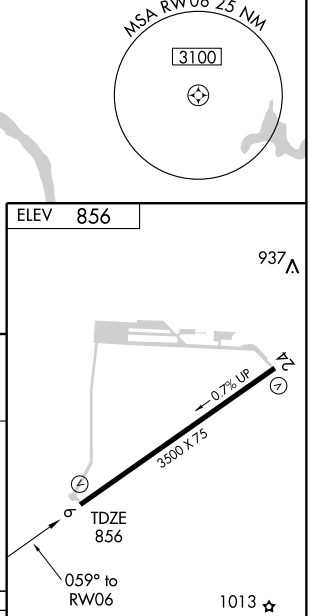
MISSED APPROACH: Climb to 1600, then climbing left turn to 3000 direct MUZIC WP and hold.

AWOS-3	CINCINNATI APP CON	CLNC DEL	UNICOM
118.475	121.0 257.725	124.9	123.0 (CTAF) L





CATEGORY	A	B	C	D
S-6	1280-1 424 (500-1)		1280-1¼ 424 (500-1¼)	NA
CIRCLING	1320-1 464 (500-1)	1520-1 664 (700-1)	1520-1¾ 664 (700-1¾)	NA



REIL Rwys 6 and 24 L
MIRL Rwy 6-24 L

EC-2, 14 JAN 2010 to 11 FEB 2010

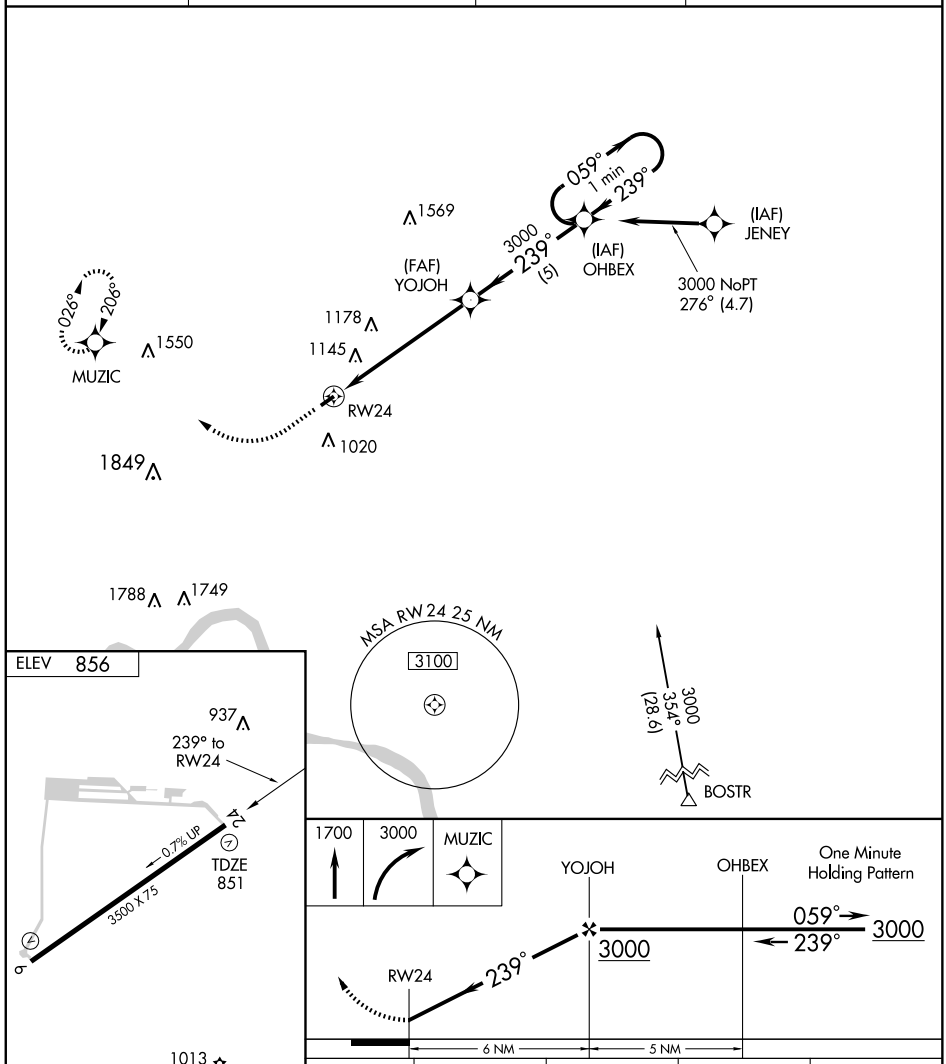
APP CRS		
239°	Rwy ldg	3500
	TDZE	851
	Apt Elev	856

GPS RWY 24
CINCINNATI-BLUE ASH (ISZ)

NA

MISSED APPROACH: Climb to 1700, then climbing right turn to 3000 direct MUZIC WP and hold.

AWOS-3	CINCINNATI APP CON	CLNC DEL	UNICOM
118.475	121.0 257.725	124.9	123.0 (CTAF) L

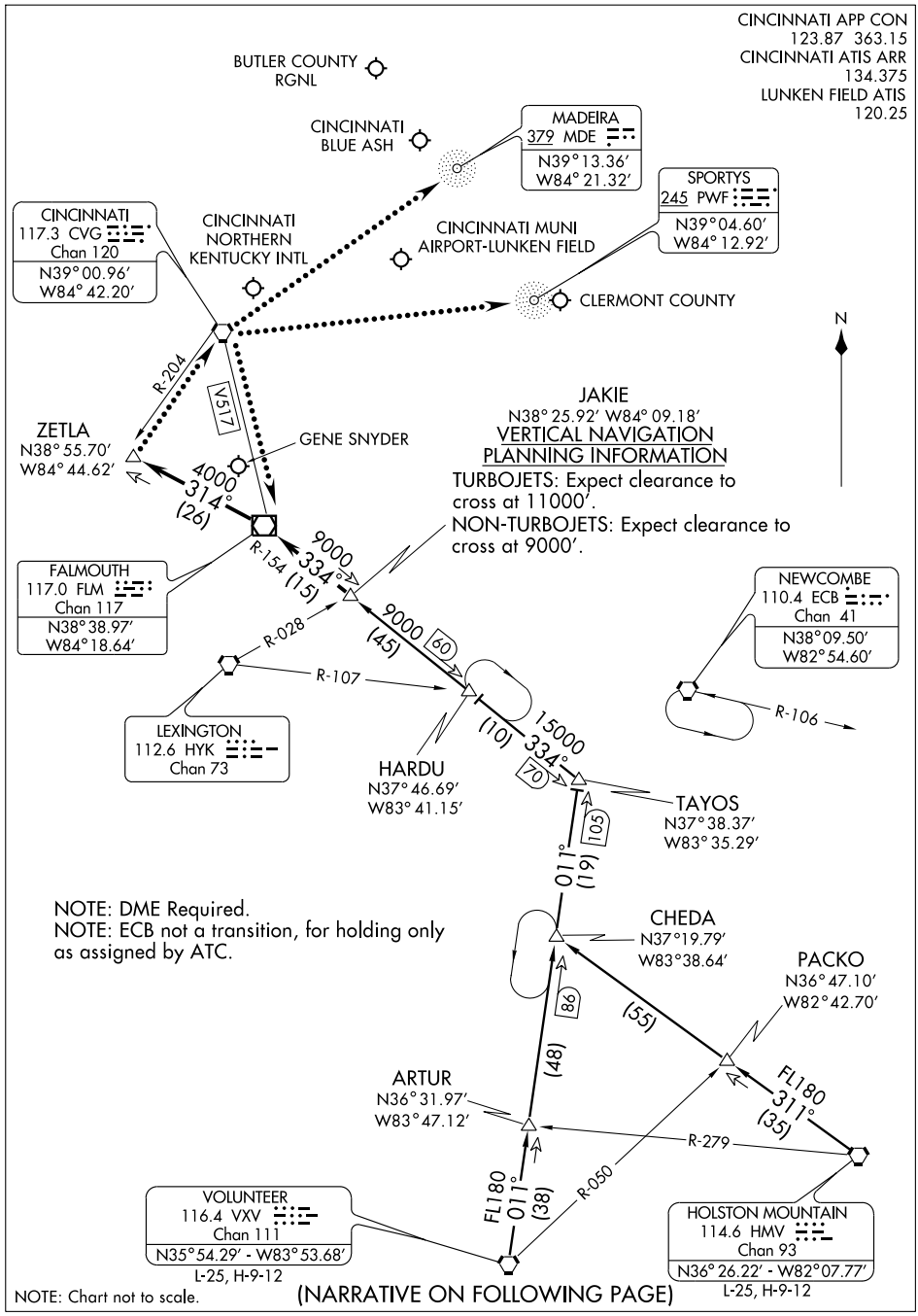


CATEGORY	A	B	C	D
S-24	1480-1 629 (700-1)		1480-1¾ 629 (700-1¾)	NA
CIRCLING	1480-1 624 (700-1)	1520-1 664 (700-1)	1520-1¾ 664 (700-1¾)	NA

REIL Rwys 6 and 24 L
MIRL Rwy 6-24 L

HARDU TWO ARRIVAL (JAKIE.HARDU2)

CINCINNATI, OHIO



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

HARDU TWO ARRIVAL (JAKIE.HARDU2) CINCINNATI, OHIO

ARRIVAL DESCRIPTION

HOLSTON MOUNTAIN TRANSITION (HMV.HARDU2): From over HMV VORTAC via HMV R-311 and VXV R-011 to TAYOS INT, then via FLM R-154 to JAKIE INT. Thence. . . .
VOLUNTEER TRANSITION (VXV.HARDU2): From over VXV VORTAC via VXV R-011 and FLM R-154 to JAKIE INT. Thence. . . .

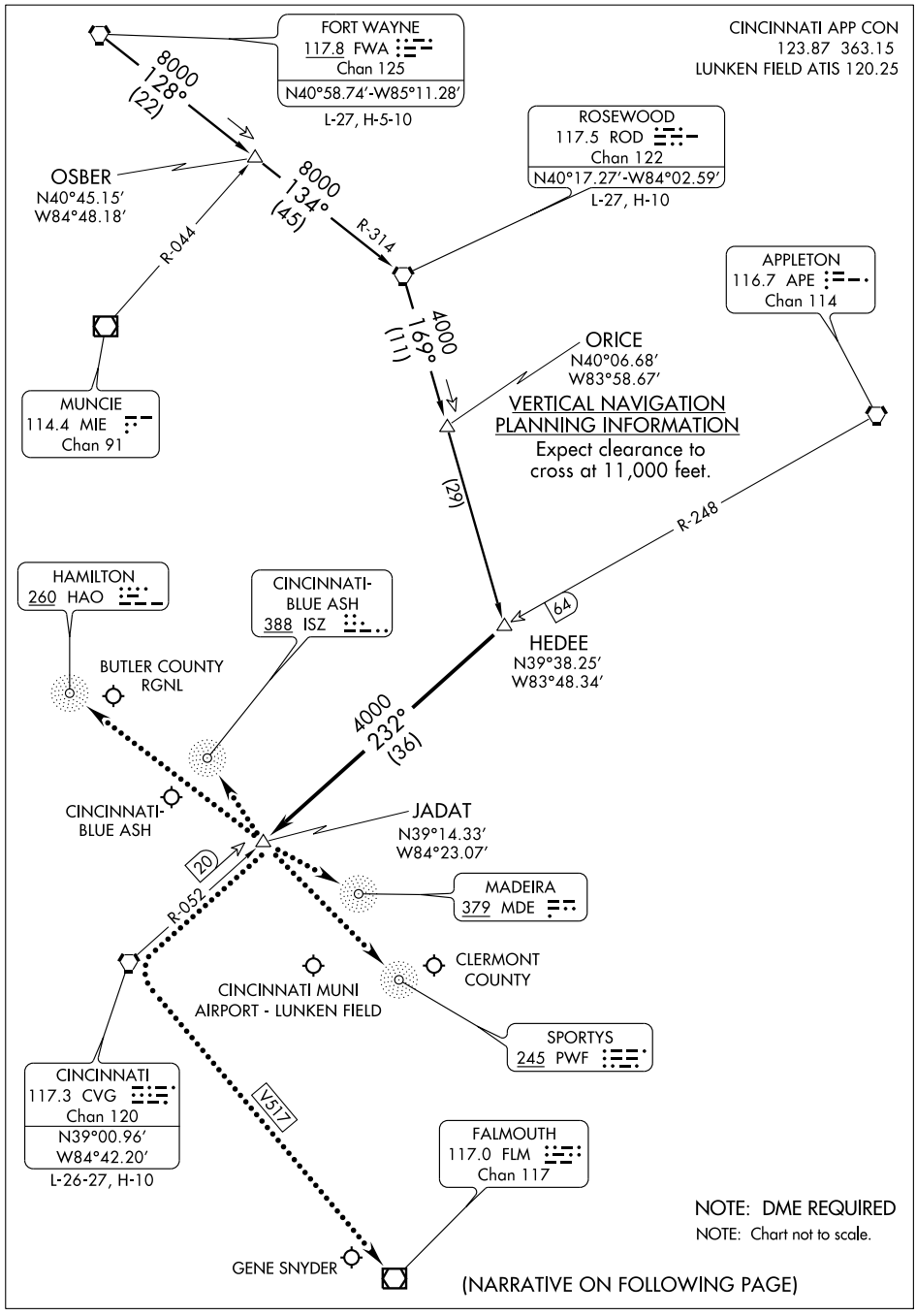
. . . .From over JAKIE INT via FLM R-154 to FLM VOR/DME, then via FLM R-314 to ZETLA INT. Expect vectors to final approach course after JAKIE INT.

LOST COMMUNICATIONS:
For Batavia/Clermont County, OH: At ZETLA INT, proceed direct to CVG VORTAC then direct SPORTYS (PWF). Maintain 4000 feet until SPORTYS (PWF).
For Butler County Rgnl, OH: At ZETLA INT, proceed direct to CVG VORTAC. Maintain 3000 feet until CVG VORTAC.
For Cincinnati/Blue Ash, OH: At ZETLA INT, proceed direct CVG VORTAC, then V517 FLM VOR/DME. Maintain 4000 feet until FLM VOR/DME.
For Cincinnati/Lunken, OH: At ZETLA INT, proceed direct CVG VORTAC then direct MADEIRA (MDE). Maintain 4000 until MADEIRA (MDE).
For Falmouth/Gene Snyder, KY: At ZETLA INT, proceed direct CVG VORTAC then via V517 FLM VOR/DME. Maintain 3000 feet until FLM VOR/DME.

SE-1, 14 JAN 2010 to 11 FEB 2010

HEDEE ONE ARRIVAL

CINCINNATI, OHIO



(NARRATIVE ON FOLLOWING PAGE)

HEDEE ONE ARRIVAL (HEDEE.HEDEE1)

ARRIVAL ROUTE DESCRIPTION

FORT WAYNE TRANSITION (FWA.HEDEE1): From over FWA VORTAC via FWA R-128 to OSBER/FWA 22 DME, then via ROD R-134 to ROD VORTAC, then via ROD R-169 to HEDEE INT. Thence. . . .
ROSEWOOD TRANSITION (ROD.HEDEE1): From over ROD VORTAC via ROD R-169 to HEDEE INT. Thence. . . .

. . . .From over HEDEE INT via CVG R-052 (MEA 4,000) to JADAT/CVG 20 DME. Expect radar vectors to final approach course at JADAT.

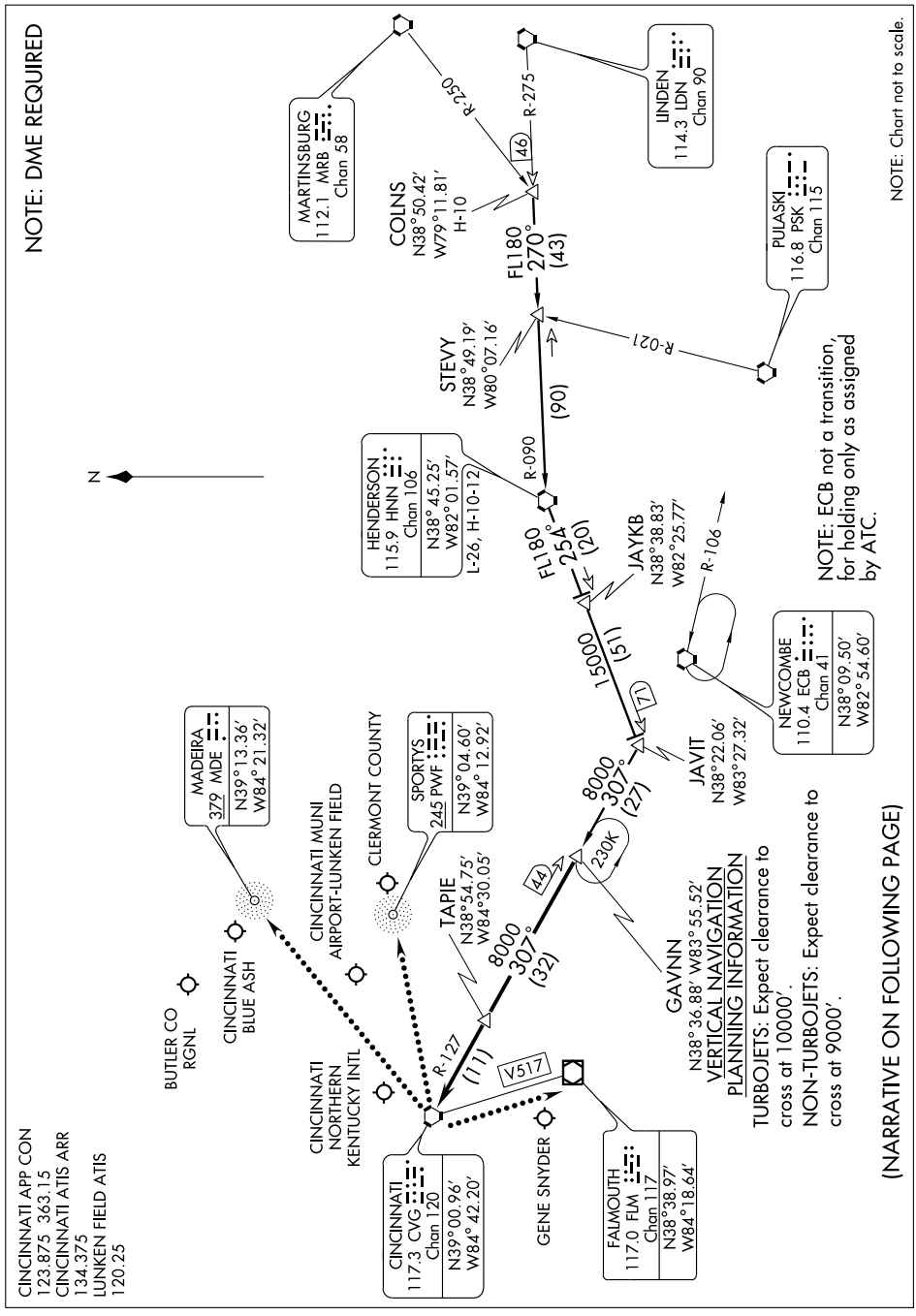
LOST COMMUNICATION PROCEDURE
In the event of lost communications for:

BUTLER COUNTY RGNL - At JADAT, proceed direct HAMILTON (HAO), maintain 4,000 feet until HAMILTON (HAO).
CINCINNATI MUNI AIRPORT - LUNKEN FIELD - At JADAT, proceed direct MADEIRA (MDE), maintain 4,000 feet until MADEIRA (MDE).
CINCINNATI BLUE ASH - At JADAT, proceed direct BLUE ASH (ISZ), maintain 4,000 feet until BLUE ASH (ISZ).
CLERMONT COUNTY - At JADAT, proceed direct SPORTYS (PWF), maintain 4,000 feet until SPORTYS (PWF).
GENE SNYDER - At JADAT, proceed direct CVG VORTAC then via V517 to FLM VOR/DME, maintain 4,000 feet until FLM VOR/DME.

EC-2, 14 JAN 2010 to 11 FEB 2010

JAVIT TWO ARRIVAL (GAVNN.JAVIT2)

CINCINNATI, OHIO



(NARRATIVE ON FOLLOWING PAGE)

JAVIT TWO ARRIVAL (GAVNN.JAVIT2)

ARRIVAL DESCRIPTION

COLNS TRANSITION (COLNS.JAVIT2): From over COLNS INT via HNN R-090 to HNN VORTAC then via HNN R-254 to JAVIT INT, then via CVG R-127 to GAVNN INT. Thence...

HENDERSON TRANSITION (HNN.JAVIT2): From over HNN VORTAC via HNN R-254 to JAVIT INT, then via CVG R-127 to GAVNN INT. Thence. . . .

. . . .From over GAVNN INT via CVG R-127 to TAPIE , then via CVG R-127 to CVG VORTAC.

Expect vectors to final approach course after GAVNN.

LOST COMMUNICATIONS:

For Batavia/Clermont County, OH: At CVG VORTAC, proceed direct SPORTYS (PWF) maintain 4000 feet until SPORTYS (PWF).

For Cincinnati/Lunken, OH: At CVG VORTAC, proceed direct MADEIRA (MDE) maintain 4000 feet until MADEIRA (MDE).

For Falmouth/Gene Snyder, KY: At CVG VORTAC, proceed via V517 FLM VOR/DME, maintain 3000 feet until FLM VOR/DME.

SE-1, 14 JAN 2010 to 11 FEB 2010

NDB ISZ	APP CRS	Rwy ldg	3500
388	050°	TDZE	856
		Apt Elev	856

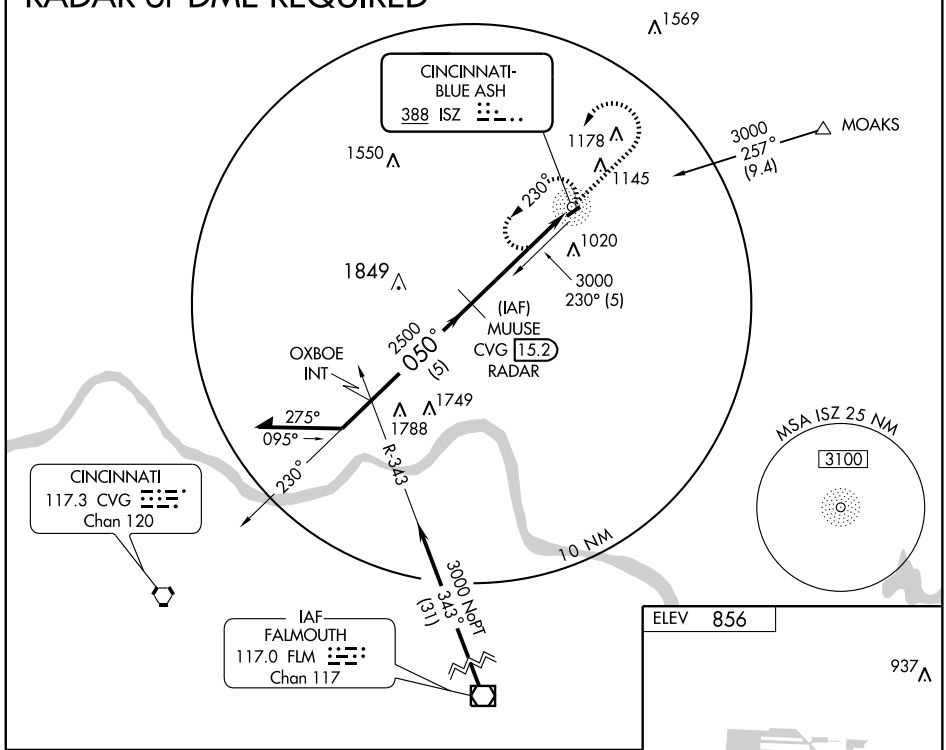
NDB RWY 6
CINCINNATI-BLUE ASH (ISZ)

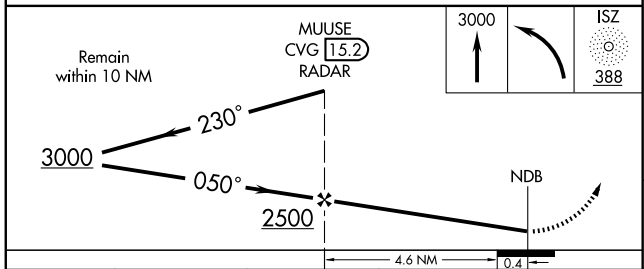
NA

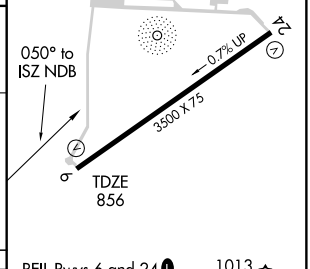
MISSED APPROACH: Climb to 3000 then left turn direct ISZ NDB and hold.

AWOS-3	CINCINNATI APP CON	CLNC DEL	UNICOM
118.475	121.0 257.725	124.9	123.0 (CTAF) L

RADAR or DME REQUIRED







REIL Rwys 6 and 24 L 1013 ☆
MIRL Rwy 6-24 L

CATEGORY	A	B	C	D
S-6	1320-1 464 (500-1)		1320-1¼ 464 (500-1¼)	NA
CIRCLING	1320-1 464 (500-1)	1520-1 664 (700-1)	1520-1¾ 664 (700-1¾)	NA

Knots	60	90	120	150	180
Min:Sec					

VORTAC CVG 117.3 Chan 120	APP CRS 231°	Rwy ldg 3500 TDZE 851 Apt Elev 856

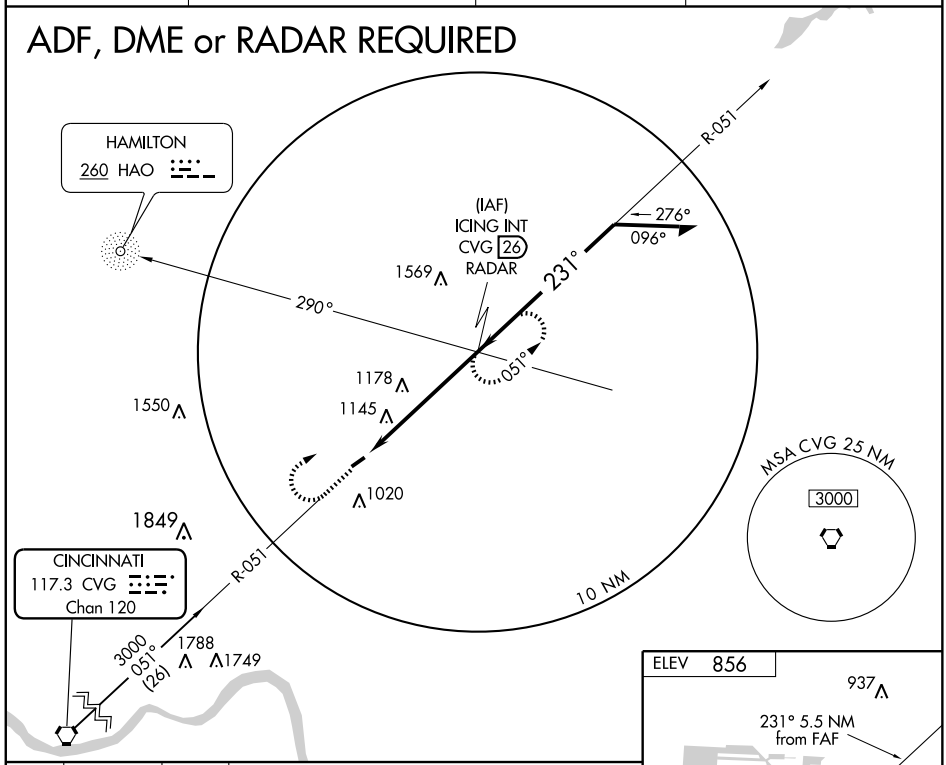
VOR RWY 24
CINCINNATI-BLUE ASH (ISZ)

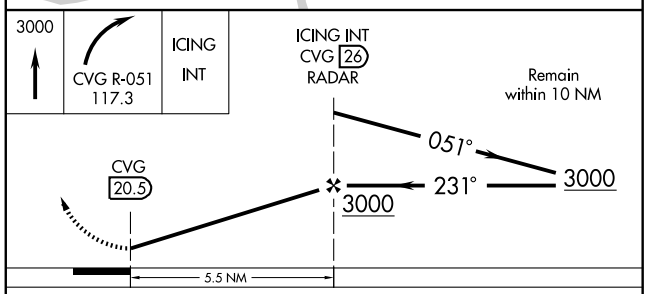
NA

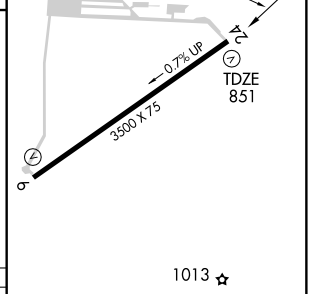
MISSED APPROACH: Climb to 3000 then right turn via CVG R-051 to ICING Int/26 DME/RADAR and hold.

AWOS-3	CINCINNATI APP CON	CLNC DEL	UNICOM
118.475	121.0 257.725	124.9	123.0 (CTAF) L

ADF, DME or RADAR REQUIRED







REIL Rwys 6 and 24 L
MIRL Rwy 6-24 L

CATEGORY	A	B	C	D
S-24	1480-1 629 (700-1)	1480-1¼ 629 (700-1¼)	1480-1½ 629 (700-1½)	NA
CIRCLING	1480-1 624 (700-1)	1520-1¼ 664 (700-1¼)	1520-1¾ 664 (700-1¾)	NA

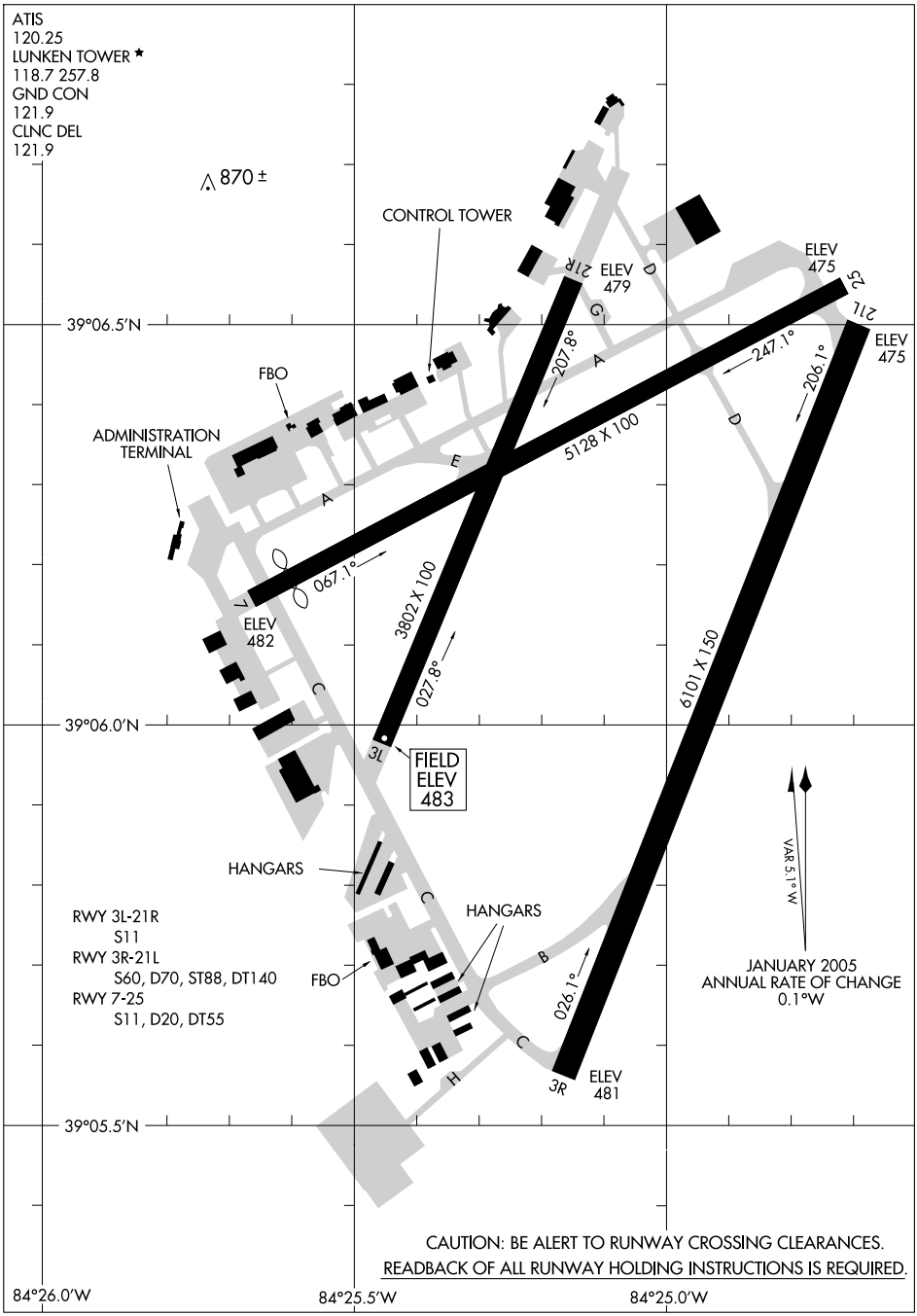
FAF to MAP 5.5 NM

Knots	60	90	120	150	180
Min:Sec	5:30	3:40	2:45	2:12	1:50

EC-2. 14 JAN 2010 to 11 FEB 2010

AIRPORT DIAGRAM

CINCINNATI MUNI AIRPORT-LUNKEN FIELD (LUK)
AL-83 (FAA)
CINCINNATI, OHIO

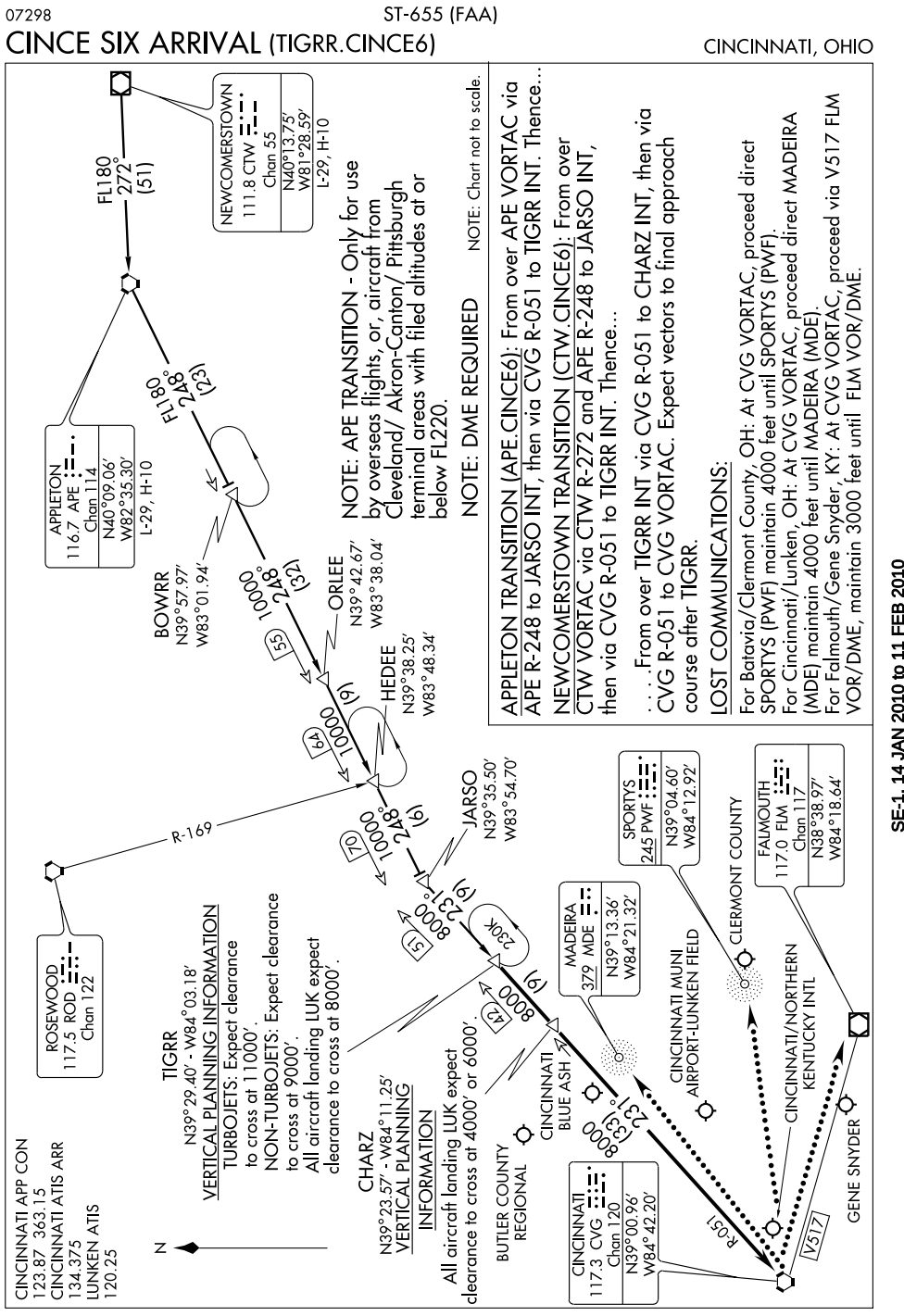


CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

EC-2, 14 JAN 2010 to 11 FEB 2010

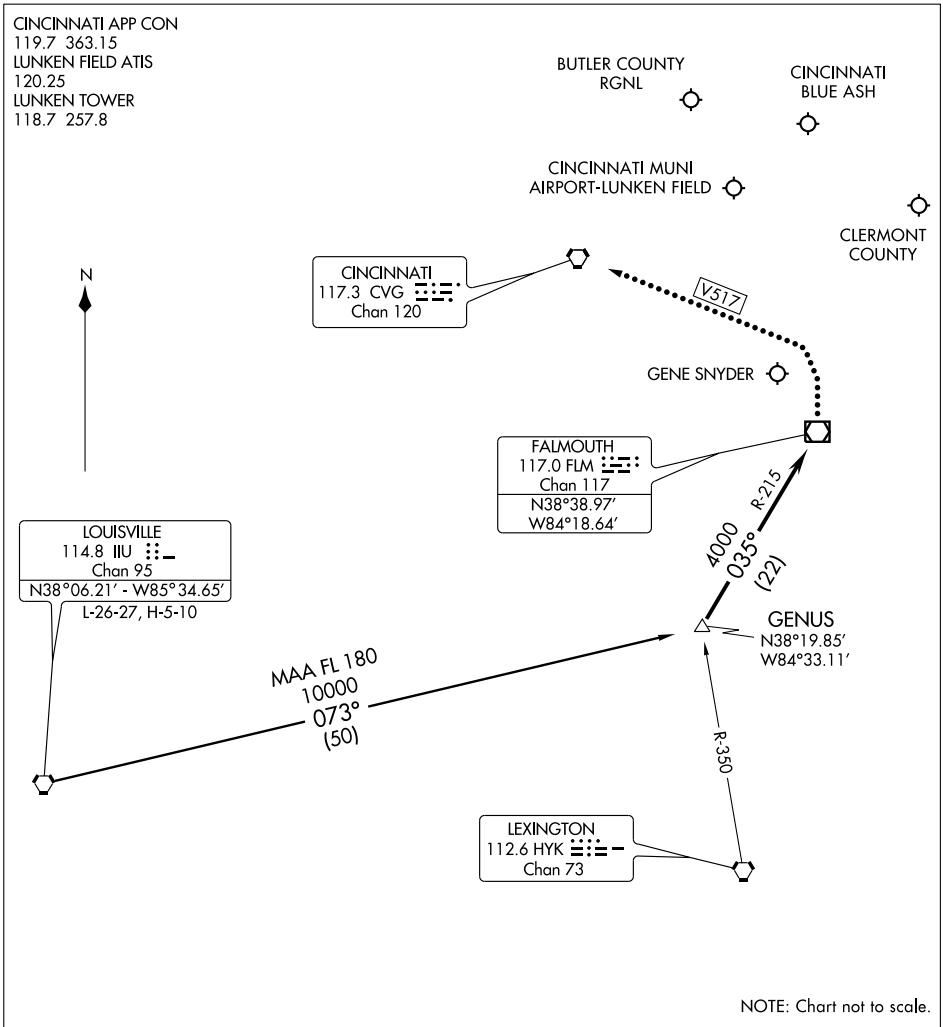
CINCE SIX ARRIVAL (TIGRR.CINCE6)

CINCINNATI, OHIO



GENUS ONE ARRIVAL

CINCINNATI, OHIO



ARRIVAL ROUTE DESCRIPTION

LOUISVILLE TRANSITION (IIU.GENUS1): From over IIU VORTAC via IIU R-073 to GENUS INT. Thence . . . .

. . . . From over GENUS INT via FLM R-215 (MEA 4000) to FLM VOR/DME. Expect radar vectors to final approach course after FLM VOR/DME.

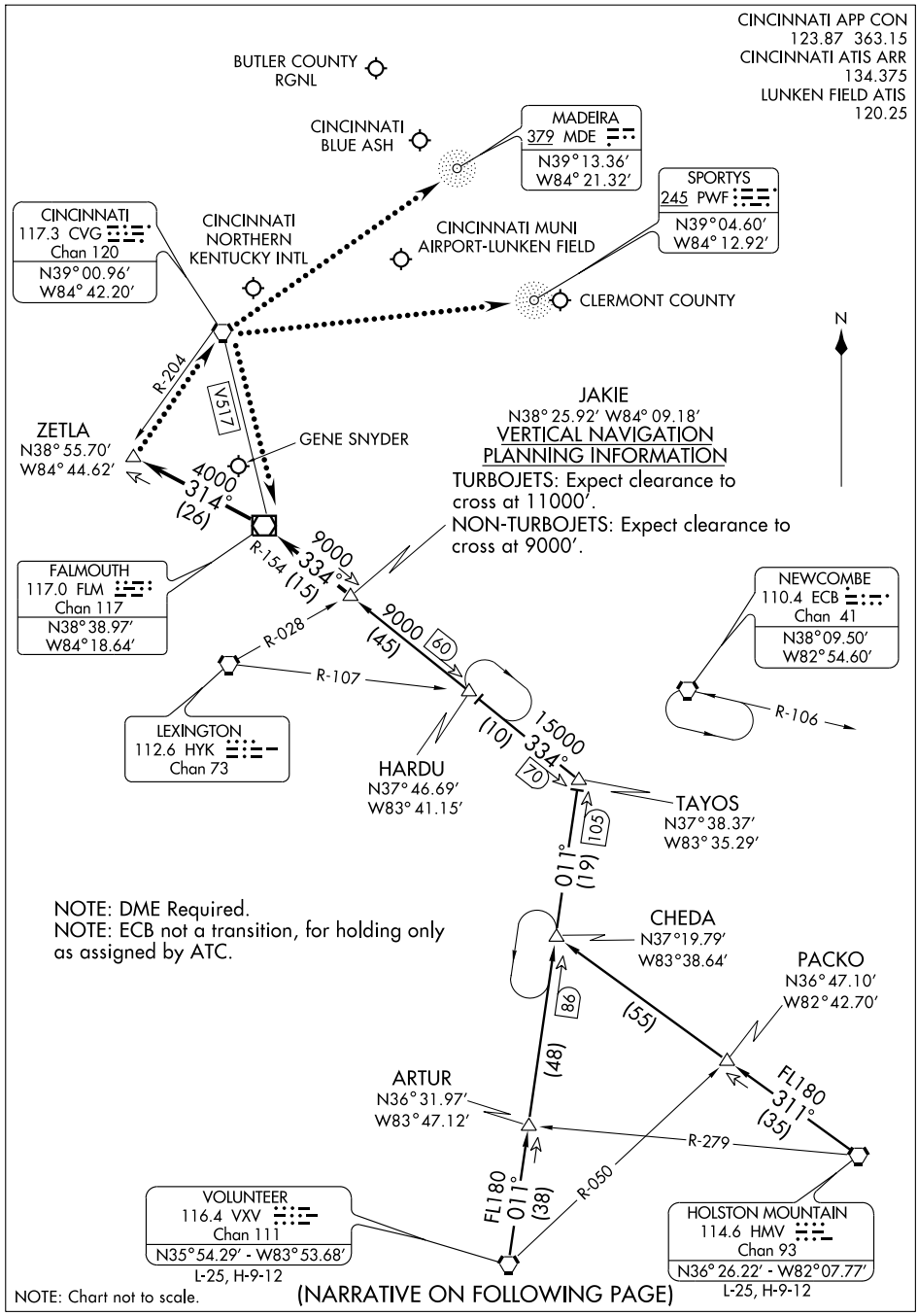
LOST COMMUNICATIONS

BUTLER COUNTY RGNL: In the event of lost communications, at FLM VOR/DME proceed V517 to CVG VORTAC. Maintain 3000 MSL until CVG VORTAC.

EC-2, 14 JAN 2010 to 11 FEB 2010

HARDU TWO ARRIVAL (JAKIE.HARDU2)

CINCINNATI, OHIO



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

HARDU TWO ARRIVAL (JAKIE.HARDU2) CINCINNATI, OHIO

ARRIVAL DESCRIPTION

HOLSTON MOUNTAIN TRANSITION (HMV.HARDU2): From over HMV VORTAC via HMV R-311 and VXV R-011 to TAYOS INT, then via FLM R-154 to JAKIE INT. Thence. . . .
VOLUNTEER TRANSITION (VXV.HARDU2): From over VXV VORTAC via VXV R-011 and FLM R-154 to JAKIE INT. Thence. . . .

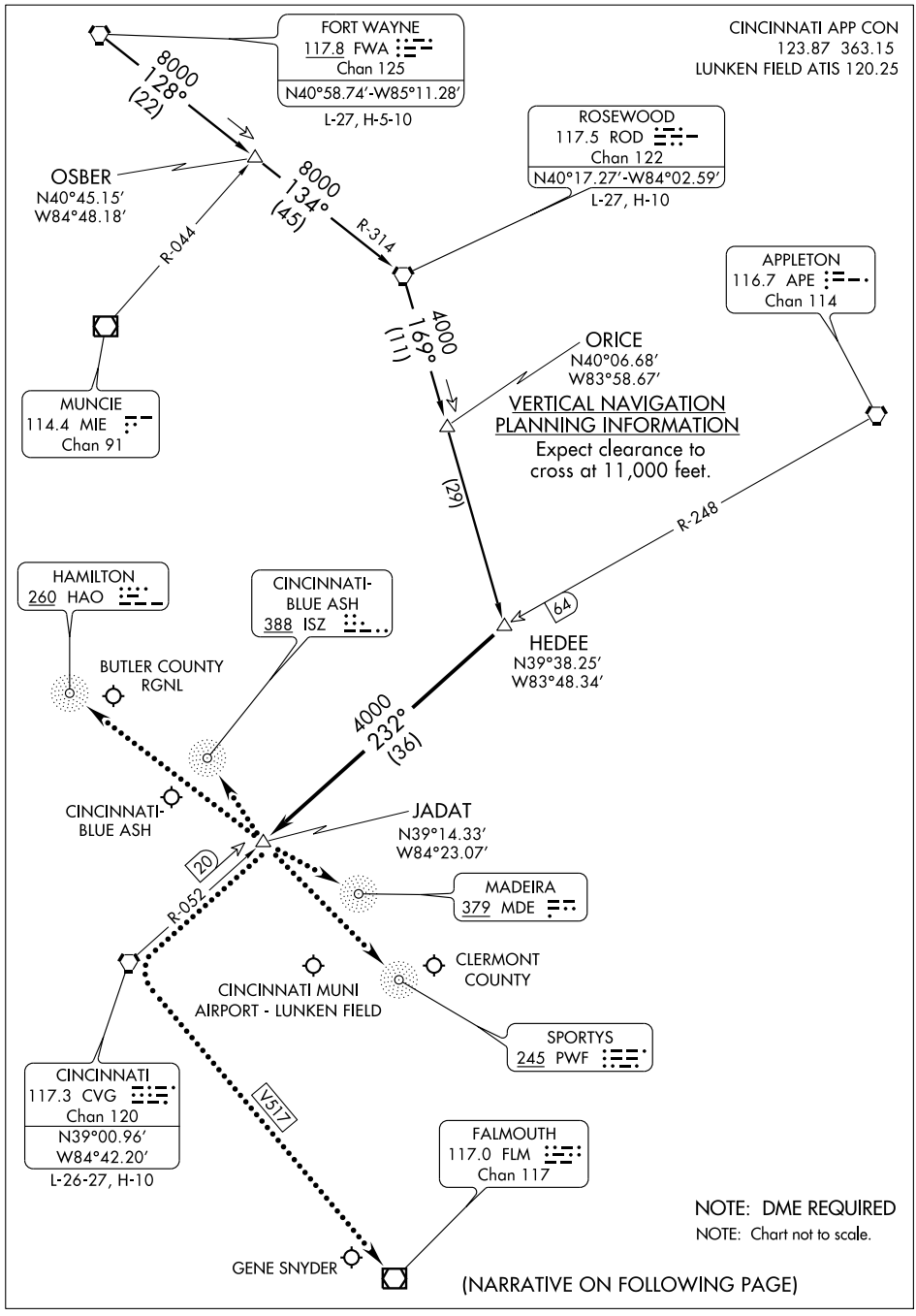
. . . .From over JAKIE INT via FLM R-154 to FLM VOR/DME, then via FLM R-314 to ZETLA INT. Expect vectors to final approach course after JAKIE INT.

LOST COMMUNICATIONS:
For Batavia/Clermont County, OH: At ZETLA INT, proceed direct to CVG VORTAC then direct SPORTYS (PWF). Maintain 4000 feet until SPORTYS (PWF).
For Butler County Rgnl, OH: At ZETLA INT, proceed direct to CVG VORTAC. Maintain 3000 feet until CVG VORTAC.
For Cincinnati/Blue Ash, OH: At ZETLA INT, proceed direct CVG VORTAC, then V517 FLM VOR/DME. Maintain 4000 feet until FLM VOR/DME.
For Cincinnati/Lunken, OH: At ZETLA INT, proceed direct CVG VORTAC then direct MADEIRA (MDE). Maintain 4000 until MADEIRA (MDE).
For Falmouth/Gene Snyder, KY: At ZETLA INT, proceed direct CVG VORTAC then via V517 FLM VOR/DME. Maintain 3000 feet until FLM VOR/DME.

SE-1, 14 JAN 2010 to 11 FEB 2010

HEDEE ONE ARRIVAL

CINCINNATI, OHIO



(NARRATIVE ON FOLLOWING PAGE)

HEDEE ONE ARRIVAL (HEDEE.HEDEE1)

ARRIVAL ROUTE DESCRIPTION

FORT WAYNE TRANSITION (FWA.HEDEE1): From over FWA VORTAC via FWA R-128 to OSBER/FWA 22 DME, then via ROD R-134 to ROD VORTAC, then via ROD R-169 to HEDEE INT. Thence. . . .
ROSEWOOD TRANSITION (ROD.HEDEE1): From over ROD VORTAC via ROD R-169 to HEDEE INT. Thence. . . .

. . . .From over HEDEE INT via CVG R-052 (MEA 4,000) to JADAT/CVG 20 DME. Expect radar vectors to final approach course at JADAT.

LOST COMMUNICATION PROCEDURE
In the event of lost communications for:

BUTLER COUNTY RGNL - At JADAT, proceed direct HAMILTON (HAO), maintain 4,000 feet until HAMILTON (HAO).
CINCINNATI MUNI AIRPORT - LUNKEN FIELD - At JADAT, proceed direct MADEIRA (MDE), maintain 4,000 feet until MADEIRA (MDE).
CINCINNATI BLUE ASH - At JADAT, proceed direct BLUE ASH (ISZ), maintain 4,000 feet until BLUE ASH (ISZ).
CLERMONT COUNTY - At JADAT, proceed direct SPORTYS (PWF), maintain 4,000 feet until SPORTYS (PWF).
GENE SNYDER - At JADAT, proceed direct CVG VORTAC then via V517 to FLM VOR/DME, maintain 4,000 feet until FLM VOR/DME.

EC-2, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-LUK	APP CRS	Rwy ldg	6101
110.9	205°	TDZE	475
Chan 46		Apt Elev	483

ILS or LOC RWY 21L

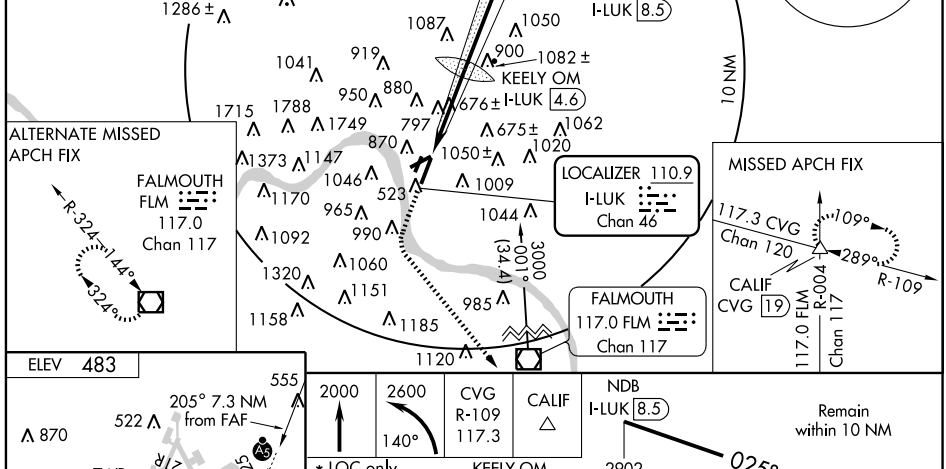
CINCINNATI MUNI AIRPORT-LUNKEN FIELD (LUK)

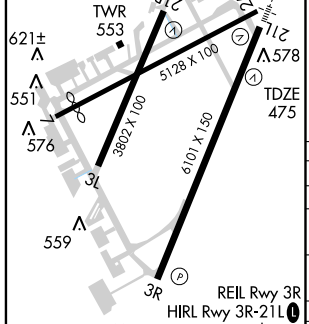
Visibility reduction by helicopters NA. When local altimeter setting not received, use Cincinnati/Northern Kentucky Intl altimeter setting and increase all DA 86 feet and all MDA 100 feet. For KEELY OM Minimums: increase S-LOC-21L Cats. C and D, Circling Cats. A, B and D visibility ¼ mile, Circling Cat. C visibility ½ mile. Inoperative table does not apply to S-LOC-21L Cat. A. VDP NA when using Cincinnati/Northern Kentucky Intl altimeter setting. For inoperative MALSR, increase S-LOC-21L Cat. B visibility ¼ mile. For KEELY OM Minimums: Increase S-LOC-21L Cats. A and B visibility ¼ mile. When using Cincinnati/Northern Kentucky Intl altimeter setting: Increase S-ILS-21L all Cats. visibility ½ mile.

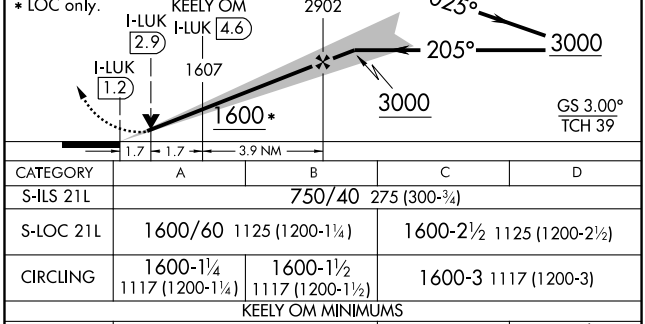
MALSR

MISSED APPROACH: Climb to 2000 then climbing left turn to 2600 via heading 140° and CVG VORTAC R-109 to CALIF INT/CVG 19 DME and hold.

ATIS	CINCINNATI APP CON	LUNKEN TOWER ★	GND CON	CLNC DEL	UNICOM
120.25	121.0 257.725	118.7 (CTAF) L 257.8	121.9	121.9	122.95







CATEGORY	A	B	C	D
S-ILS 21L	750/40 275 (300-¾)			
S-LOC 21L	1600/60 1125 (1200-1¼)		1600-2½ 1125 (1200-2½)	
CIRCLING	1600-1¼ 1117 (1200-1¼)	1600-1½ 1117 (1200-1½)	1600-3 1117 (1200-3)	
KEELY OM MINIMUMS				
S-LOC 21L	1040/40 565 (600-¾)		1040/50 565 (600-1)	1040/60 565 (600-1¼)
CIRCLING	1300-1 817 (900-1)	1360-1¼ 877 (900-1¼)	1360-2½ 877 (900-2½)	1360-2¾ 877 (900-2¾)

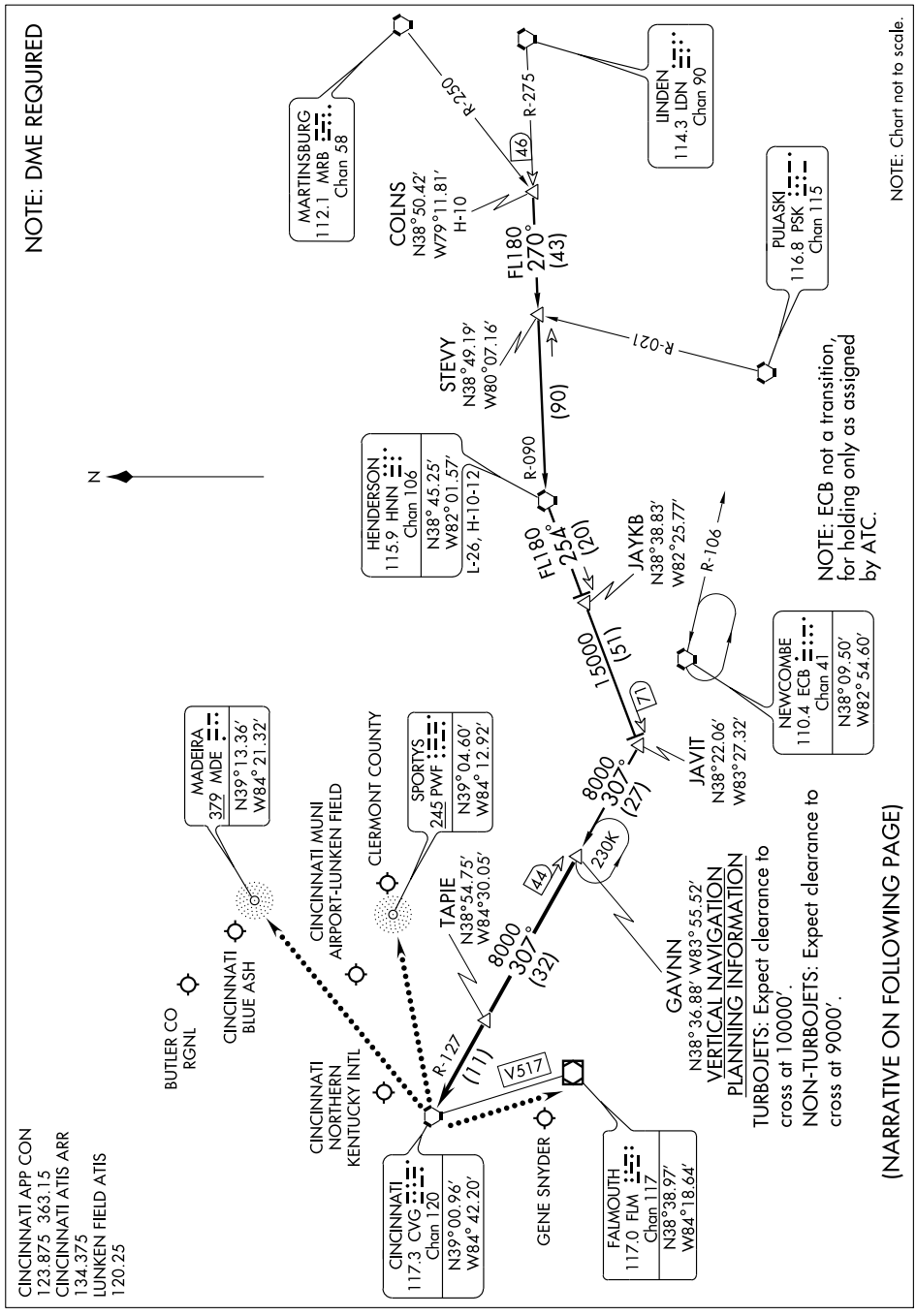
FAF to MAP 7.3 NM

Knots	60	90	120	150	180
Min:Sec	7:18	4:52	3:39	2:55	2:26

EC-2, 14 JAN 2010 to 11 FEB 2010

JAVIT TWO ARRIVAL (GAVNN.JAVIT2)

CINCINNATI, OHIO



(NARRATIVE ON FOLLOWING PAGE)

JAVIT TWO ARRIVAL (GAVNN.JAVIT2)

ARRIVAL DESCRIPTION

COLNS TRANSITION (COLNS.JAVIT2): From over COLNS INT via HNN R-090 to HNN VORTAC then via HNN R-254 to JAVIT INT, then via CVG R-127 to GAVNN INT. Thence...

HENDERSON TRANSITION (HNN.JAVIT2): From over HNN VORTAC via HNN R-254 to JAVIT INT, then via CVG R-127 to GAVNN INT. Thence. . . .

. . . .From over GAVNN INT via CVG R-127 to TAPIE , then via CVG R-127 to CVG VORTAC.

Expect vectors to final approach course after GAVNN.

LOST COMMUNICATIONS:

For Batavia/Clermont County, OH: At CVG VORTAC, proceed direct SPORTYS (PWF) maintain 4000 feet until SPORTYS (PWF).

For Cincinnati/Lunken, OH: At CVG VORTAC, proceed direct MADEIRA (MDE) maintain 4000 feet until MADEIRA (MDE).

For Falmouth/Gene Snyder, KY: At CVG VORTAC, proceed via V517 FLM VOR/DME, maintain 3000 feet until FLM VOR/DME.

SE-1, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-LUK	APP CRS	Rwy ldg	6101
110.9	025°	TDZE	482
Chan 46		Apt Elev	483

LOC BC RWY 3R

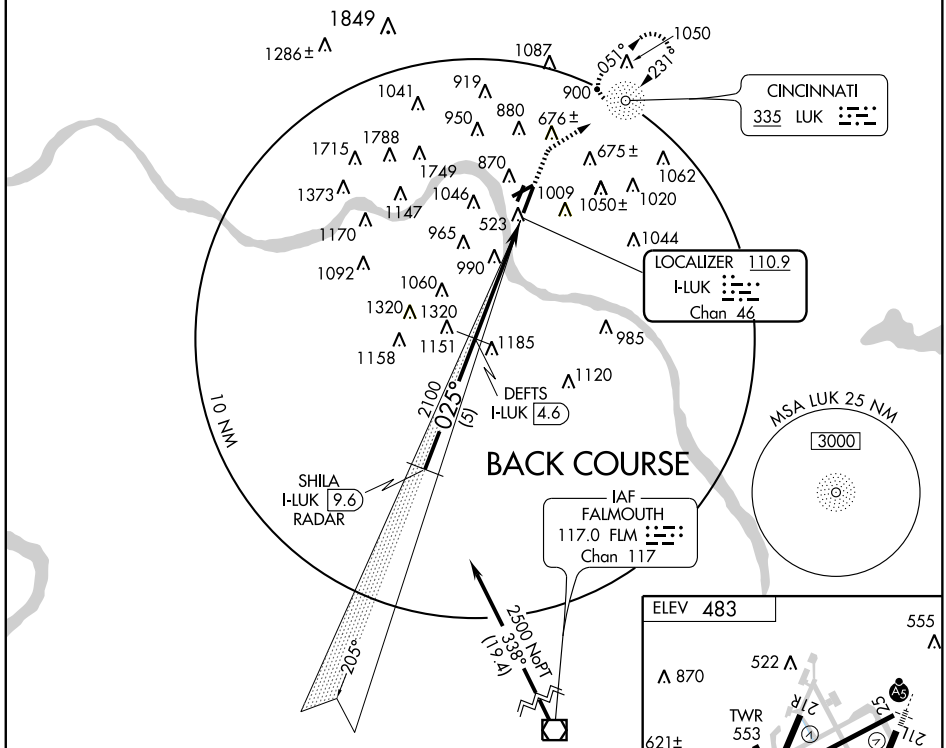
CINCINNATI MUNI AIRPORT-LUNKEN FIELD (LUK)

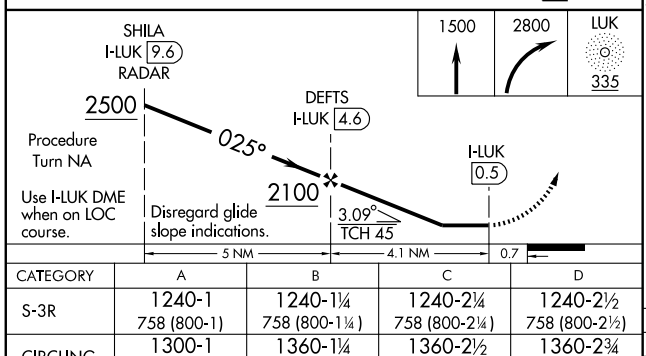
LOC back course unusable beyond 10 NM.
LOC back course unusable 15 degrees left and right of course within 10 NM of threshold.

MISSED APPROACH: Climb to 1500 then climbing right turn to 2800 direct LUK NDB and hold.

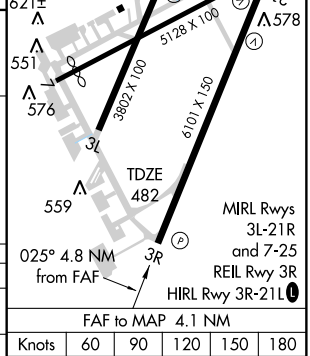
ATIS	CINCINNATI APP CON	LUNKEN TOWER ★	GND CON	CLNC DEL	UNICOM
120.25	121.0 257.725	118.7 (CTAF) L 257.8	121.9	121.9	122.95

DME or RADAR and ADF REQUIRED





CATEGORY	A	B	C	D
S-3R	1240-1 758 (800-1)	1240-1¼ 758 (800-1¼)	1240-2¼ 758 (800-2¼)	1240-2½ 758 (800-2½)
CIRCLING	1300-1 816 (900-1)	1360-1¼ 876 (900-1¼)	1360-2½ 876 (900-2½)	1360-2¾ 876 (900-2¾)



FAF to MAP 4.1 NM

Knots	60	90	120	150	180
Min:Sec	4:06	2:44	2:03	1:38	1:22

EC-2, 14 JAN 2010 to 11 FEB 2010

NDB MDE	APP CRS	Rwy ldg	6101
379	205°	TDZE	475
		Apt Elev	483

NDB RWY 21L

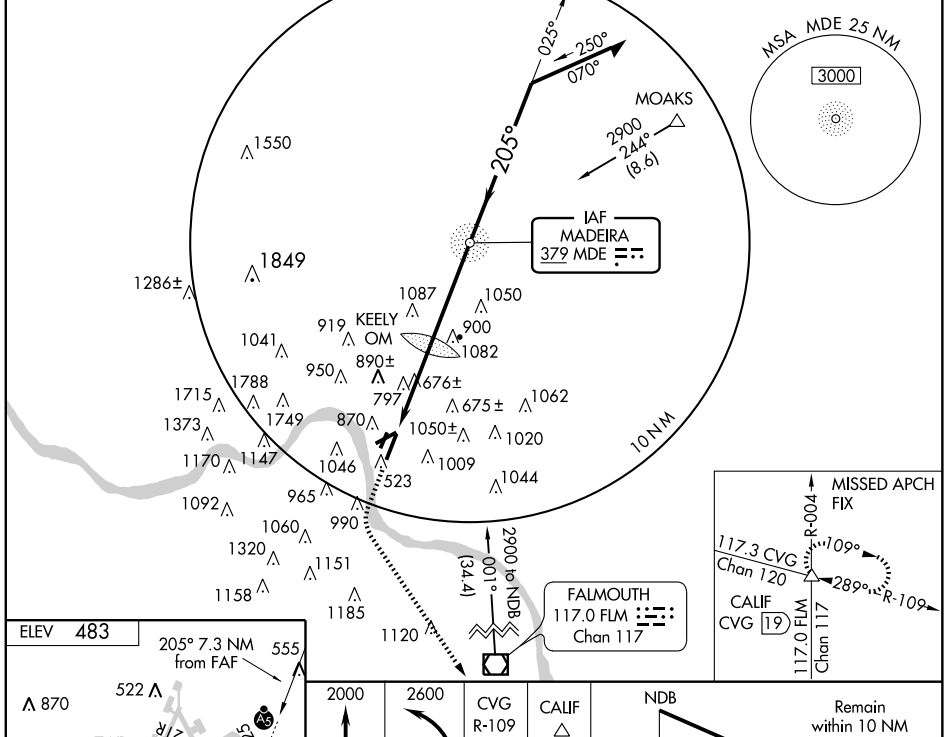
CINCINNATI MUNI AIRPORT-LUNKEN FIELD (LUK)

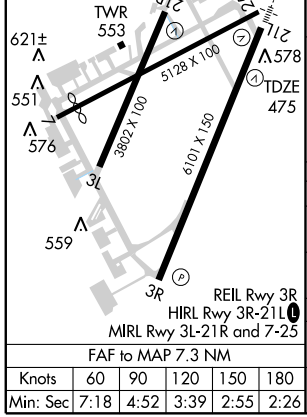
Inoperative table does not apply to S-21L Cat A. KEELY OM Minimums: For inoperative MALSR increase S-21L Cat B visibility to RVR 6000. When local altimeter setting not received, use Cincinnati/Northern Kentucky Intl altimeter setting and increase all MDA 100 feet, increase KEELY OM Minimums S-21L Cats C and D, circling Cats A, B & D visibility ¼ mile, and increase circling Cat C visibility ½ mile.

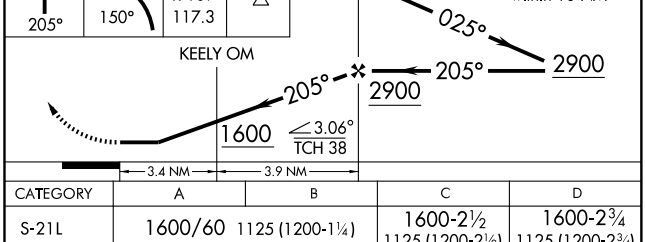
MALSR

MISSED APPROACH: Climb to 2000 via heading 205° then climbing left turn to 2600 via heading 150° and via CVG VORTAC R-109 to CALIF INT and hold.

ATIS	CINCINNATI APP CON	LUNKEN TOWER ★	GND CON	CLNC DEL	UNICOM
120.25	121.0 257.725	118.7 (CTAF) L 257.8	121.9	121.9	122.95







CATEGORY	A	B	C	D
S-21L	1600/60 1125 (1200-1¼)		1600-2½ 1125 (1200-2½)	1600-2¾ 1125 (1200-2¾)
CIRCLING	1600-1¼ 1117 (1200-1¼)	1600-1½ 1117 (1200-1½)	1600-3 1117 (1200-3)	
KEELY OM MINIMUMS				
S-21L	1240/40 765 (800-¾)		1240-1¾ 765 (800-1¾)	1240-2¼ 765 (800-2¼)
CIRCLING	1300-1 817 (900-1)	1360-1¼ 877 (900-1¼)	1360-2½ 877 (900-2½)	1360-2¾ 877 (900-2¾)

FAF to MAP 7.3 NM

Knots	60	90	120	150	180
Min: Sec	7:18	4:52	3:39	2:55	2:26

EC-2, 14 JAN 2010 to 11 FEB 2010

NDB LUK 335	APP CRS 232°	Rwy ldg 5128 TDZE 478 Apt Elev 483

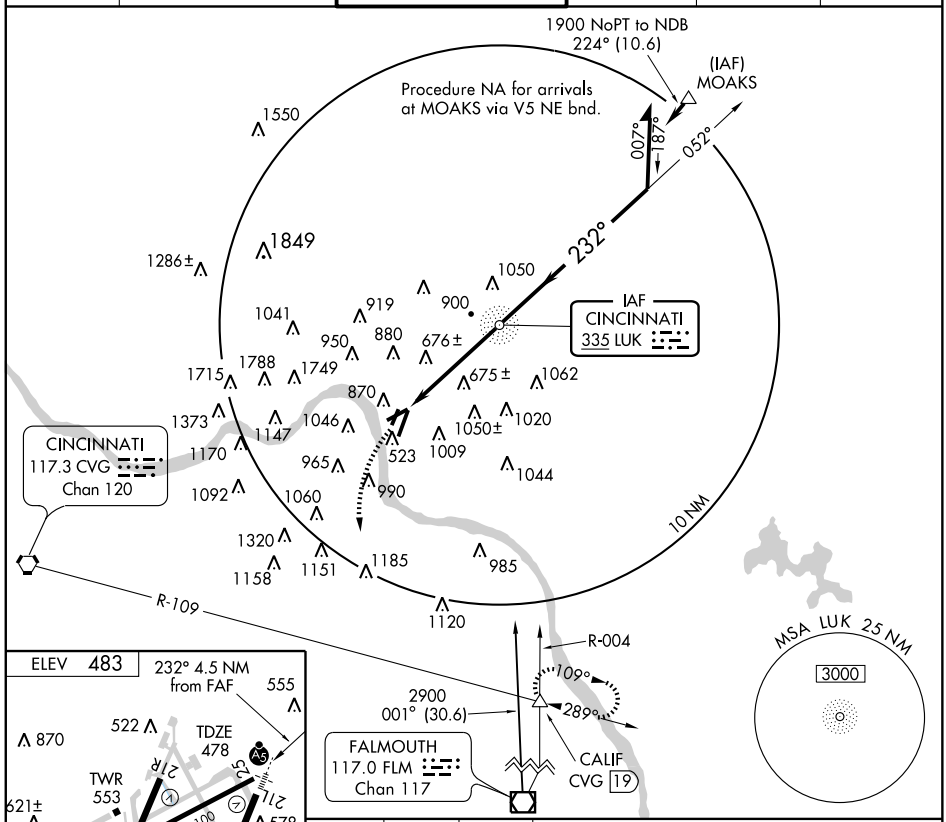
NDB RWY 25

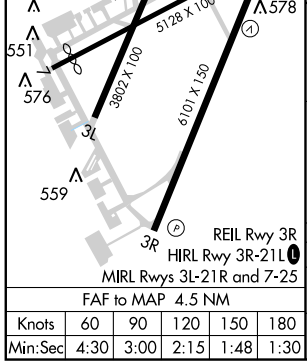
CINCINNATI MUNI AIRPORT-LUNKEN FIELD (LUK)

If local altimeter setting not received, use Cincinnati/Northern Kentucky Intl altimeter setting and increase all MDAs 100 feet. Visibility reduction by helicopters NA.

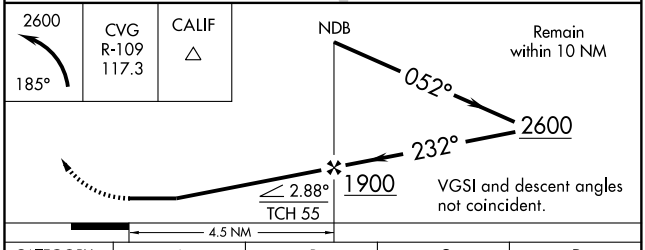
MISSED APPROACH: Climbing left turn to 2600 via heading 185° and CVG VORTAC R-109 to CALIF Int and hold.

ATIS	CINCINNATI APP CON	LUNKEN TOWER ★	GND CON	CLNC DEL	UNICOM
120.25	121.0 257.725	118.7 (CTAF) L 257.8	121.9	121.9	122.95





FAF to MAP 4.5 NM					
Knots	60	90	120	150	180
Min:Sec	4:30	3:00	2:15	1:48	1:30



CATEGORY	A	B	C	D
S-25	1320 - 1 842 (900-1)	1320 - 1¼ 842 (900-1¼)	1320 - 2½ 842 (900-2½)	1320 - 2¾ 842 (900-2¾)
CIRCLING	1320 - 1 837 (900-1)	1360 - 1¼ 877 (900-1¼)	1360 - 2½ 877 (900-2½)	1360 - 2¾ 877 (900-2¾)

EC-2, 14 JAN 2010 to 11 FEB 2010

WAAS CH 42511 W21A	APP CRS 205°	Rwy ldg 6101 TDZE 475 Apt Elev 483

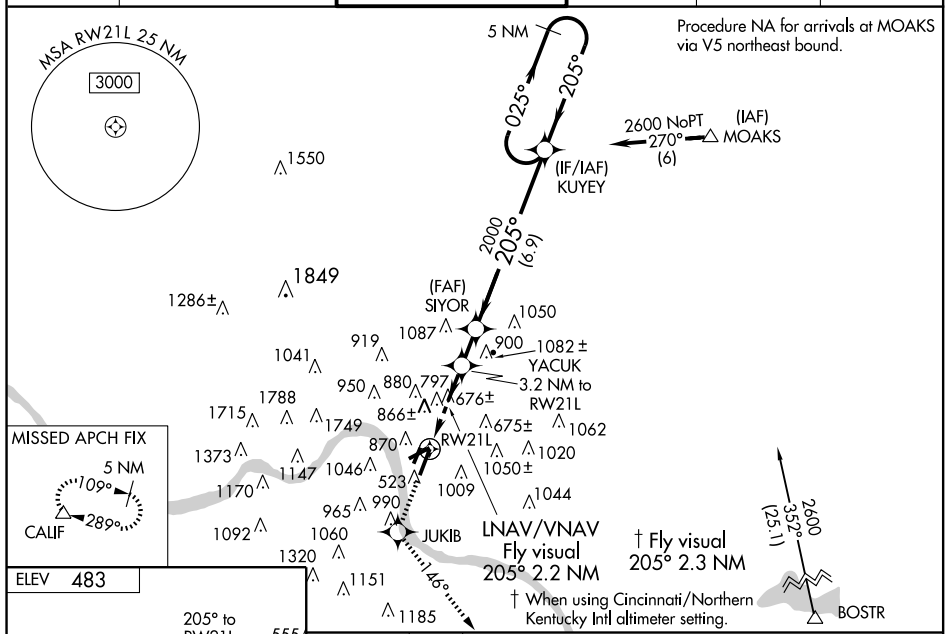
RNAV (GPS) RWY 21L
CINCINNATI MUNI AIRPORT-LUNKEN FIELD (LUK)

DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Baro-VNAV and VDP NA when using Cincinnati/Northern Kentucky Intl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -15°C (5°F) or above 47°C (116°F). When local altimeter setting not received, use Cincinnati/Northern Kentucky Intl altimeter setting and increase all DA 86 feet, all MDA 100 feet, and increase LPV all Cats, LNAV/VNAV Cats C and D, LNAV Cat B, and Circling Cats B & D visibility ¼ mile, increase LNAV Cat C and Circling Cat C visibility ½ mile. For inoperative MALSR, increase LPV all Cats visibility ½ mile. Inoperative table does not apply to LNAV/VNAV.

MALSR

MISSED APPROACH: Climb to 2600 direct JUKIB and via 146° track to CALIF and hold.

ATIS	CINCINNATI APP CON	LUNKEN TOWER ★	GND CON	CLNC DEL	UNICOM
120.25	121.0 257.725	118.7 (CTAF) 257.8	121.9	121.9	122.95



CATEGORY	A	B	C	D
LPV DA	834/40 359 (400-¾)			
LNAV/VNAV DA	1230-2 755 (800-2)		1230-2¼ 755 (800-2¼)	1230-2½ 755 (800-2½)
LNAV MDA	1120/40 645 (700-¾)		1120/60 645 (700-1¼)	1120-1½ 645 (700-1½)
CIRCLING	1300-1 817 (900-1)	1360-1¼ 877 (900-1¼)	1360-2½ 877 (900-2½)	1360-2¾ 877 (900-2¾)

EC-2, 14 JAN 2010 to 11 FEB 2010

WAAS CH 86701 W25A	APP CRS 246°	Rwy ldg 5128 TDZE 478 Apt Elev 483

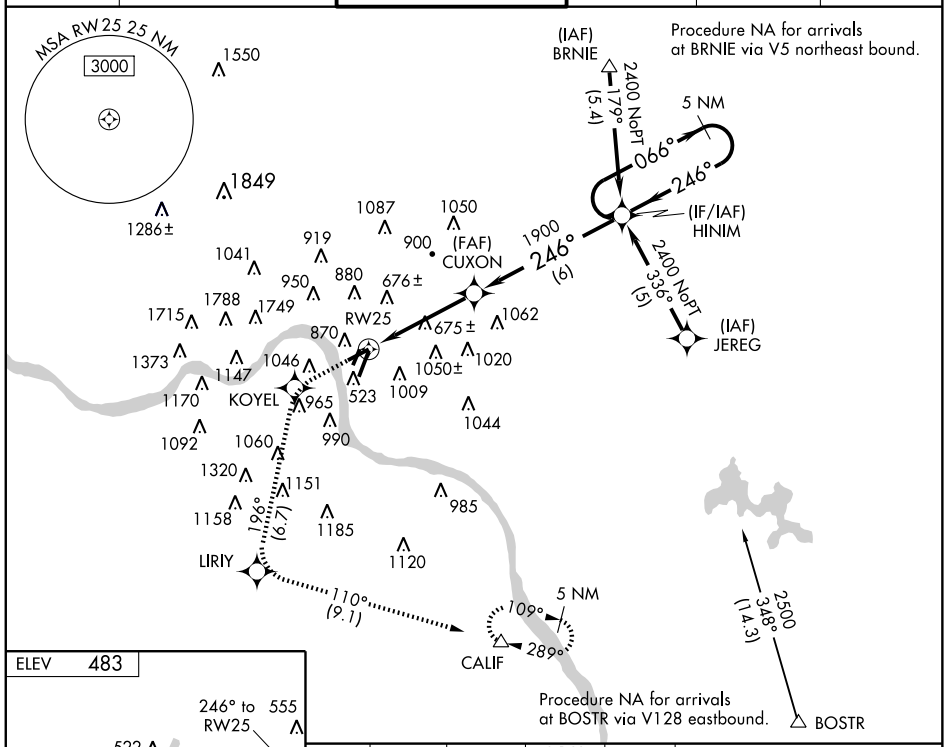
RNAV (GPS) RWY 25

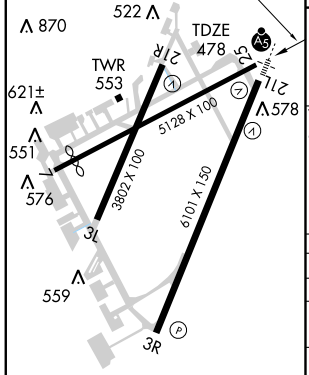
CINCINNATI MUNI AIRPORT-LUNKEN FIELD (LUK)

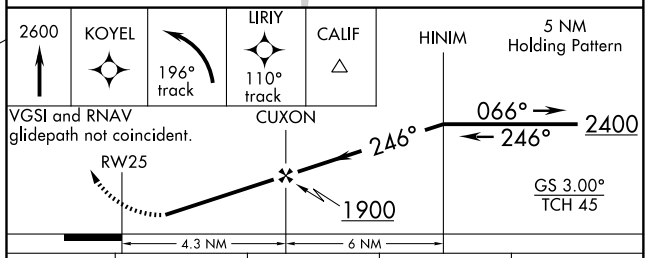
DME/DME RNP-0.3 NA. If local altimeter setting not received, use Cincinnati/Northern Kentucky Intl altimeter setting and increase all DAs/MDAs 100 feet. Visibility reduction by helicopter NA.

MISSED APPROACH: Climb to 2600 direct KOYEL and left turn via 196° track to LIRIY, and via 110° track to CALIF and hold.

ATIS	CINCINNATI APP CON	LUNKEN TOWER ★	GND CON	CLNC DEL	UNICOM
120.25	121.0 257.725	118.7 (CTAF) 257.8	121.9	121.9	122.95







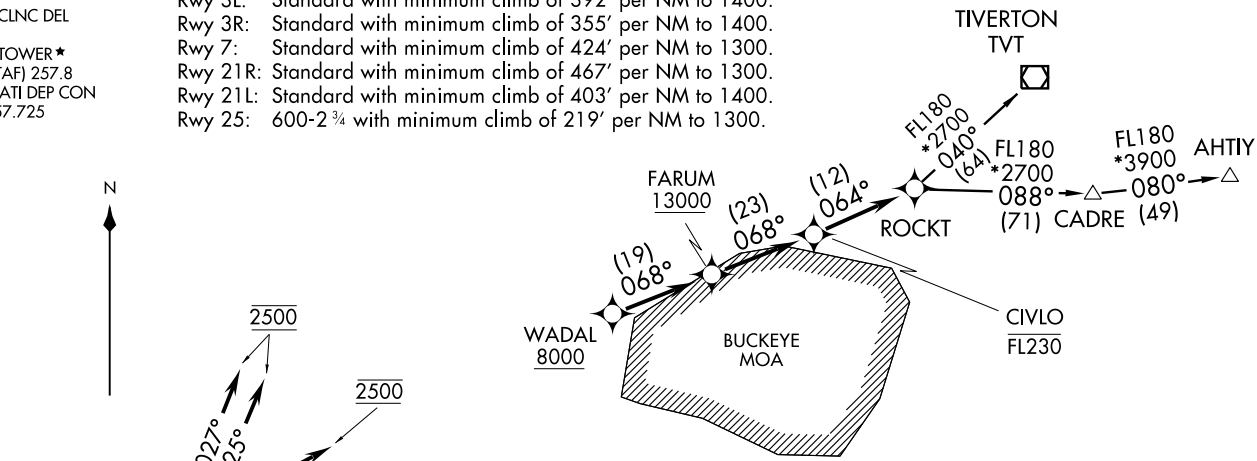
CATEGORY	A	B	C	D
LPV DA	875-1½ 397 (400-1½)			
LNAV/VNAV DA	NA			
LNAV MDA	1160-1 682 (700-1)		1160-2 682 (700-2)	1160-2¼ 682 (700-2¼)
CIRCLING	1300-1 817 (900-1)	1360-1¼ 877 (900-1¼)	1360-2½ 877 (900-2½)	1360-2¾ 877 (900-2¾)

EC-2, 14 JAN 2010 to 11 FEB 2010

ATIS 120.25
LUNKEN GND CON
121.9
LUNKEN CLNC DEL
121.9
LUNKEN TOWER★
118.7 (CTAF) 257.8
CINCINNATI DEP CON
121.0 257.725

TAKE-OFF MINIMUMS:

Rwy 3L: Standard with minimum climb of 392′ per NM to 1400.
Rwy 3R: Standard with minimum climb of 355′ per NM to 1400.
Rwy 7: Standard with minimum climb of 424′ per NM to 1300.
Rwy 21R: Standard with minimum climb of 467′ per NM to 1300.
Rwy 21L: Standard with minimum climb of 403′ per NM to 1400.
Rwy 25: 600-2 ¾ with minimum climb of 219′ per NM to 1300.



NOTE: Departure procedure limited to aircraft with the following destination airports and departure times:
Anytime - ABE, AGC, ALB, AVP, BDL, BKL, BOS, BWI, CAK, CGF, CLE, LNN, LPR, MDT, MHT, PHL, PIT, PNE, PVD, PWM, TTN, SWF, UNV, and overseas flights. LGA, between 1000-1800 UTC.

NOTE: If unable to accept ATC climb rates and crossing restrictions, advise ATC on initial contact.

NOTE: DME/DME/IRU or GPS Required

NOTE: RADAR REQUIRED

NOTE: RNAV 1

NOTE: Transponder code will be issued via PDC or Cincinnati CLNC DEL.

NOTE: Accelerate to 250 KIAS, if unable, advise ATC.

NOTE: TIVERTON TRANSITION (ROCKT3.TVT) limited to aircraft landing BKL, CAK, CLE, CGF, LNN and LPR.

NOTE: For Non-GPS equipped aircraft: CVG and FLM DMEs must be operational.

NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

(ROCKT3.ROCKT) 09071
ROCKT THREE DEPARTURE (RNAV)
SL-83 (FAA)
CINCINNATI MUNI AIRPORT-LUNKEN FIELD (LUK)
CINCINNATI, OHIO

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 3L: Climb heading 027°, expect vectors to WADAL, then via depicted route to ROCKT, thence . . . .
TAKE-OFF RUNWAY 3R: Climb heading 025°, expect vectors to WADAL, then via depicted route to ROCKT, thence . . . .
TAKE-OFF RUNWAY 7: Climb heading 066°, expect vectors to WADAL, then via depicted route to ROCKT, thence . . . .
TAKE-OFF RUNWAY 21R: Climb heading 207°, expect vectors to WADAL, then via depicted route to ROCKT, thence . . . .
TAKE-OFF RUNWAY 21L: Climb heading 205°, expect vectors to WADAL, then via depicted route to ROCKT, thence . . . .
TAKE-OFF RUNWAY 25: Climb heading 246° to 1100, then climbing left turn heading 180°, expect vectors to WADAL, then via depicted route to ROCKT, thence . . . .

. . . . maintain 2500. Expect clearance to filed altitude within 10 minutes after departure.

AHTIY TRANSITION (ROCKT3.AHTIY)
TIVERTON TRANSITION (ROCKT3.TVT)

TAKEOFF OBSTACLE NOTES

Rwy 3L: Bldg and Hangars beginning 306′ from DER, 258′ left of centerline, up to 41′ AGL/521′ MSL.
Multiple Trees beginning 958′ from DER, 144′ right of centerline, up to 67′ AGL/556′ MSL.
Trees 1.3 NM from DER, 2,271′ left of centerline, 97′ AGL/866′ MSL.
Pole 1.6 NM from DER, 334′ left of centerline, 68′ AGL/797′ MSL.

Rwy 3R: Multiple Trees beginning 1,426′ from DER, 196′ left of centerline, up to 68′ AGL/557′ MSL.
Multiple Trees beginning 840′ from DER, 130′ right of centerline, up to 83′ AGL/572′ MSL.
Trees 1.4 NM from DER, 2,393′ left of centerline, 97′ AGL/856′ MSL.
Pole 1.6 NM from DER, 2,062′ left of centerline, 68′ AGL/797′ MSL.

Rwy 7: Multiple Trees beginning 447′ from DER, 68′ left of centerline, up to 87′ AGL/576′ MSL.
Multiple Trees beginning 664′ from DER, 45′ left of centerline, up to 86′ AGL/575′ MSL.
Trees 4,515′ from DER, 1,519′ right of centerline, 81′ AGL/720′ MSL.
Trees 1.4 NM from DER, 2,088′ right of centerline, 95′ AGL/824′ MSL.

Rwy 21R: Multiple Trees beginning 1,444′ from DER, 204′ left of centerline, up to 66′ AGL/555′ MSL.
Multiple Trees beginning 1,072′ from DER, 25′ right of centerline, up to 79′ AGL/568′ MSL.
Trees 1.1 NM from DER, 2,261′ right of centerline, 86′ AGL/895′ MSL.
Tower 2.3 NM from DER, 527′ left of centerline, 168′ AGL/990′ MSL.
Tower 2.4 NM from DER, 694′ right of centerline, 106′ AGL/943′ MSL.

Rwy 21L: Multiple Trees beginning 122′ from DER, 104′ left of centerline, up to 85′ AGL/574′ MSL.
Multiple Trees beginning 422′ from DER, 313′ right of centerline, up to 82′ AGL/571′ MSL.
Trees 4,521′ from DER, 1,659′ left of centerline, 117′ AGL/716′ MSL.
Tower 2.0 NM from DER, 2,027′ right of centerline, 168′ AGL/990′ MSL.
Pole 2.2 NM from DER, 281′ right of centerline, 78′ AGL/841′ MSL.

Rwy 25: Sign, Pole, multiple Hangars and Trees beginning 177′ from DER, 13′ left of centerline, up to 86′ AGL/575′ MSL.
Road, Bldg, multiple Poles and Trees beginning 185′ from DER, 5′ right of centerline, up to 73′ AGL/562′ MSL.
Trees 4,537′ from DER, 837′ right of centerline, 82′ AGL/831′ MSL.
Tank 1.4 NM from DER, 1,755′ right of centerline, 210′ AGL/1,046′ MSL.
Antenna on building 2.3 NM from DER, 2,552′ left of centerline, 116′ AGL/915′ MSL.

VOR XUB	APP CRS	Rwy ldg	4351
112.5	165°	TDZE	685
		Apt Elev	685

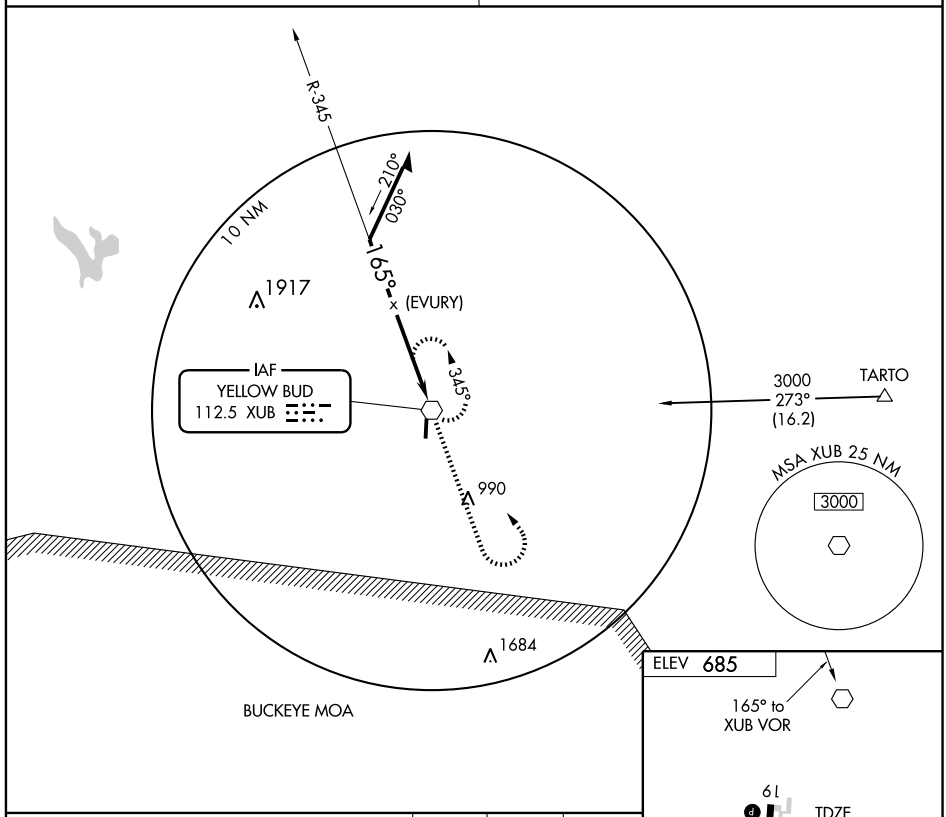
VOR or GPS RWY 19

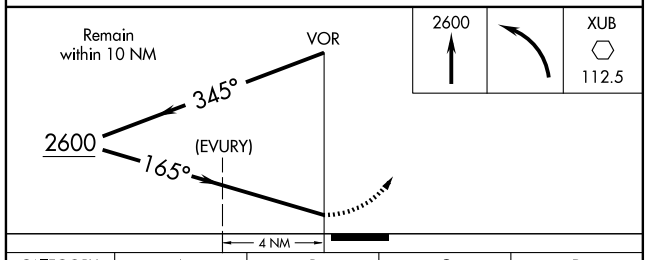
CIRCLEVILLE / PICKAWAY COUNTY MEMORIAL (CYO)

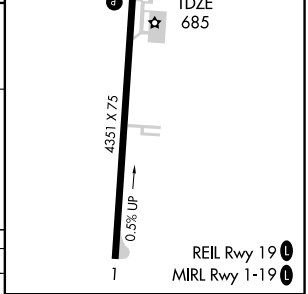
NA Use Columbus Rickenbacker altimeter setting.

MISSED APPROACH: Climb to 2600 then left turn direct XUB VOR and hold.

COLUMBUS APP CON	UNICOM
132.3 279.6	122.7 (CTAF) L







CATEGORY	A	B	C	D
S-19	1280-1	595 (600-1)	1280-1½ 595 (600-1½)	1280-1¾ 595 (600-1¾)
CIRCLING	1280-1	595 (600-1)	1280-1½ 595 (600-1½)	1300-2 615 (700-2)

Knots	60	90	120	150	180
Min:Sec					

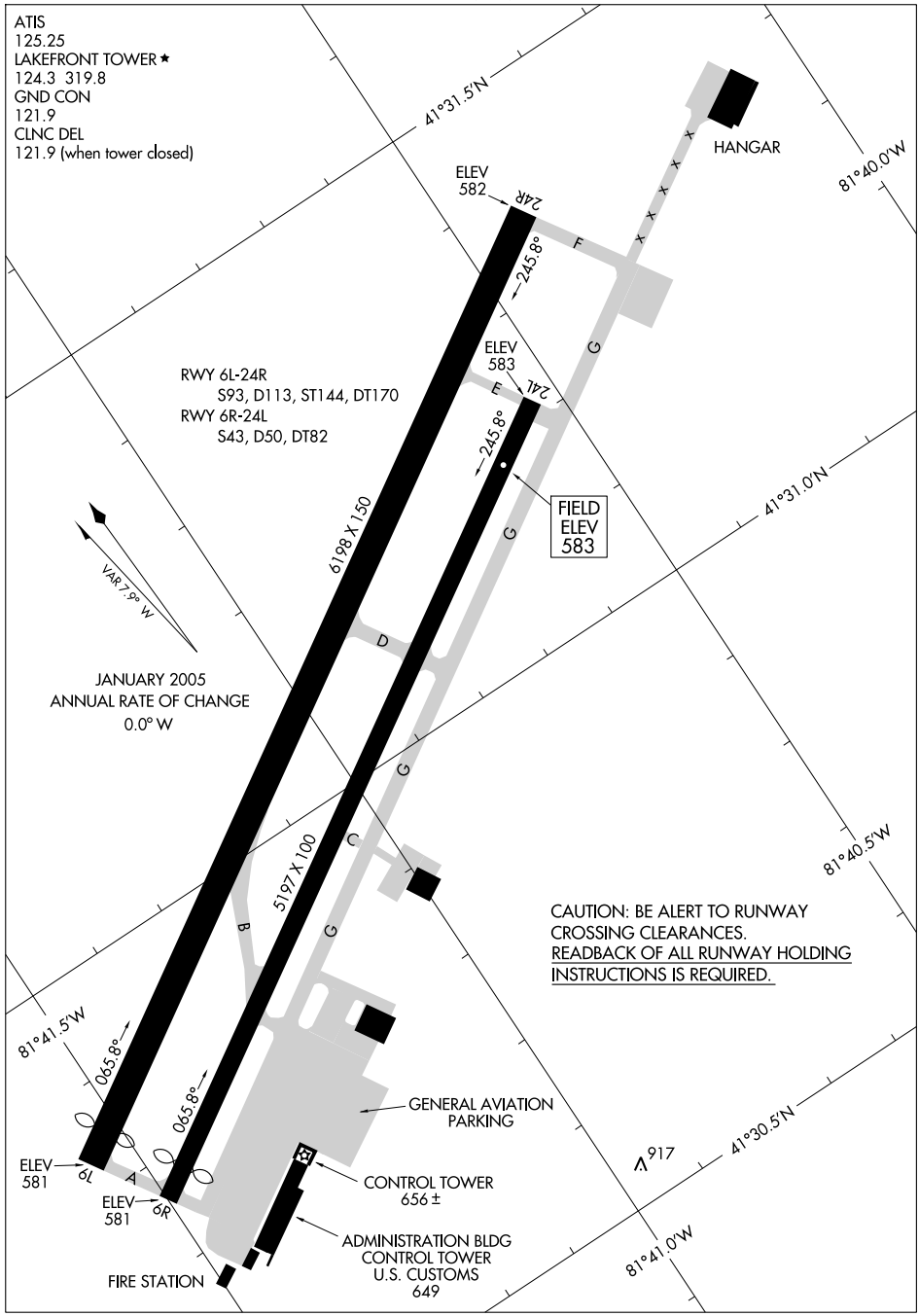
EC-2, 14 JAN 2010 to 11 FEB 2010

09015

AIRPORT DIAGRAM

AL-5370 (FAA)

CLEVELAND/ BURKE LAKEFRONT (BKL)
CLEVELAND, OHIO



EC-2, 14 JAN 2010 to 11 FEB 2010

ATIS
125.25
CLEVELAND DEP CON
125.35 346.32

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 6L, 6R: Climb via heading 065° to 1800 then via assigned heading to 3000 thence. . . .

TAKE-OFF RUNWAYS 24R, 24L: Climbing right turn via CXR VOR/DME R-272 to 1900 then via assigned heading to 3000 thence. . . .

. . . . or assigned altitude for radar vectors to HUDDZ, then via 267° track to AMRST, then via 324° track to ALPHE. Expect filed altitude/flight level ten (10) minutes after departure.

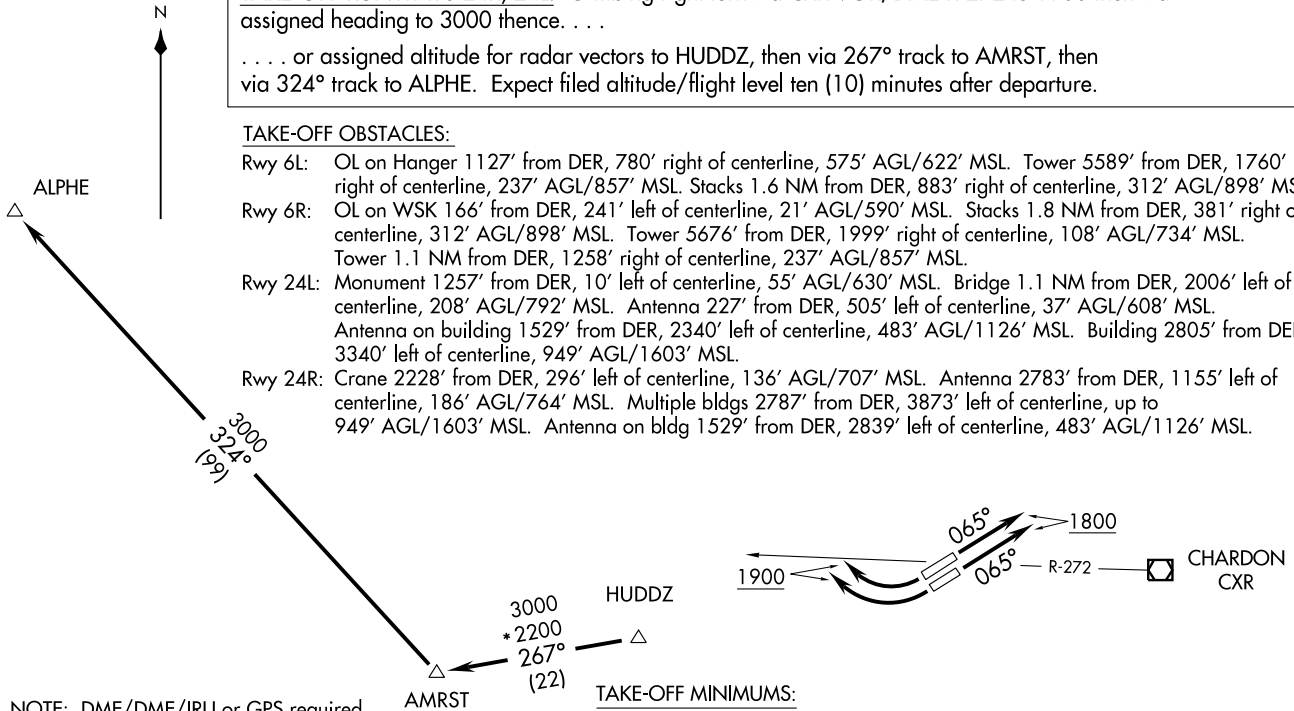
TAKE-OFF OBSTACLES:

Rwy 6L: OL on Hanger 1127′ from DER, 780′ right of centerline, 575′ AGL/622′ MSL. Tower 5589′ from DER, 1760′ right of centerline, 237′ AGL/857′ MSL. Stacks 1.6 NM from DER, 883′ right of centerline, 312′ AGL/898′ MSL.

Rwy 6R: OL on WSK 166′ from DER, 241′ left of centerline, 21′ AGL/590′ MSL. Stacks 1.8 NM from DER, 381′ right of centerline, 312′ AGL/898′ MSL. Tower 5676′ from DER, 1999′ right of centerline, 108′ AGL/734′ MSL. Tower 1.1 NM from DER, 1258′ right of centerline, 237′ AGL/857′ MSL.

Rwy 24L: Monument 1257′ from DER, 10′ left of centerline, 55′ AGL/630′ MSL. Bridge 1.1 NM from DER, 2006′ left of centerline, 208′ AGL/792′ MSL. Antenna 227′ from DER, 505′ left of centerline, 37′ AGL/608′ MSL. Antenna on building 1529′ from DER, 2340′ left of centerline, 483′ AGL/1126′ MSL. Building 2805′ from DER, 3340′ left of centerline, 949′ AGL/1603′ MSL.

Rwy 24R: Crane 2228′ from DER, 296′ left of centerline, 136′ AGL/707′ MSL. Antenna 2783′ from DER, 1155′ left of centerline, 186′ AGL/764′ MSL. Multiple bldgs 2787′ from DER, 3873′ left of centerline, up to 949′ AGL/1603′ MSL. Antenna on bldg 1529′ from DER, 2839′ left of centerline, 483′ AGL/1126′ MSL.



TAKE-OFF MINIMUMS:

Rwy 6L: 400-2 or STANDARD with minimum climb of 400 feet per NM to 1800′.
Rwy 6R: 400-2 or STANDARD with minimum climb of 360 feet per NM to 1800′.
Rwy 24L: 300-1½ or STANDARD with minimum climb of 527 feet per NM to 1900′.
Rwy 24R: 200-1 or STANDARD with minimum climb of 527 feet per NM to 1900′.

NOTE: DME/DME/IRU or GPS required
NOTE: RNAV 1
NOTE: RADAR REQUIRED

NOTE: Chart not to scale.

ALPHE TWO DEPARTURE (RNAV)

(ALPHE2.ALPHE) 09127

SL-5370 (FAA)

CLEVELAND / BURKE LAKEFRONT (BKL)
CLEVELAND, OHIO

ATIS DEP
125.25
CLEVELAND DEP CON
125.35 346.325

NOTE: RADAR REQUIRED

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 6L, 6R: Climb via heading 065° to 1800 then via assigned heading to 3000 thence . . .

TAKE-OFF RUNWAYS 24R, 24L: Climbing right turn via CXR VOR/DME R-272 to 1900 then via assigned heading to 3000 thence . . .

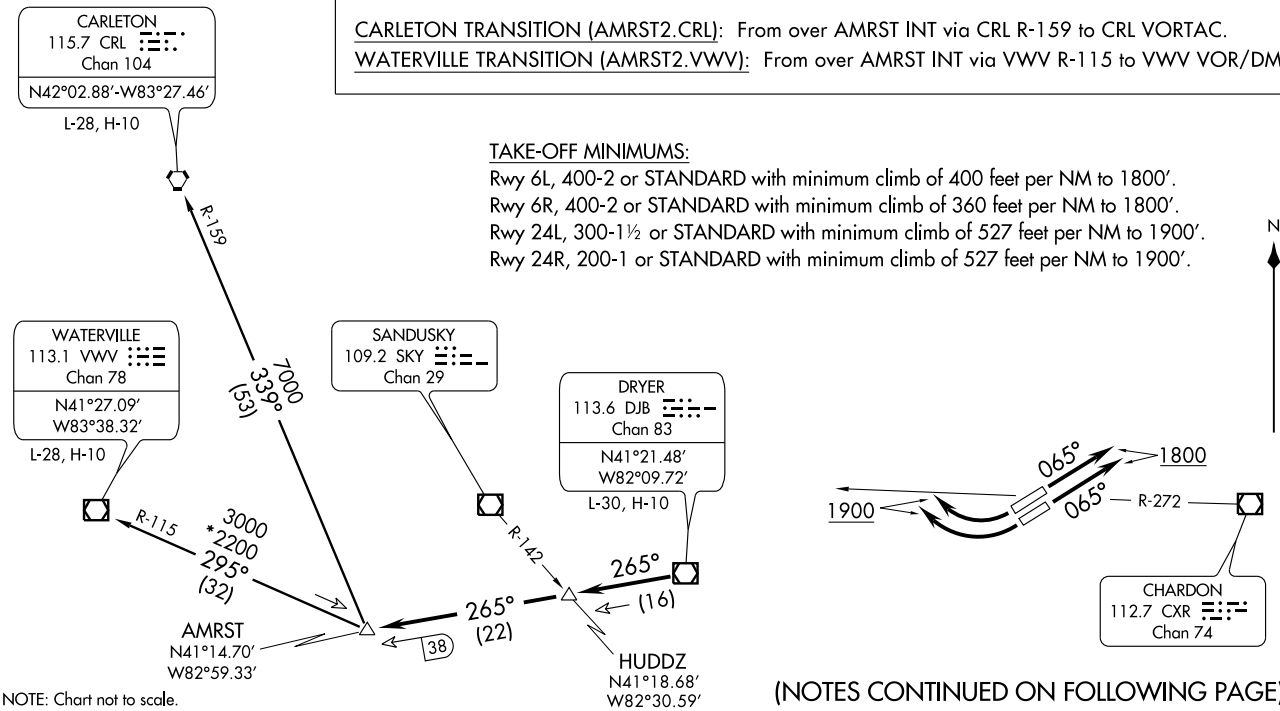
. . . . or assigned altitude for vectors to intercept the DJB VOR/DME R-265 to AMRST INT then via (Transition). Expect filed altitude/flight level ten (10) minutes after departure.

CARLETON TRANSITION (AMRST2.CRL): From over AMRST INT via CRL R-159 to CRL VORTAC.

WATERVILLE TRANSITION (AMRST2.VWV): From over AMRST INT via VWV R-115 to VWV VOR/DME.

TAKE-OFF MINIMUMS:

Rwy 6L, 400-2 or STANDARD with minimum climb of 400 feet per NM to 1800′.
Rwy 6R, 400-2 or STANDARD with minimum climb of 360 feet per NM to 1800′.
Rwy 24L, 300-1½ or STANDARD with minimum climb of 527 feet per NM to 1900′.
Rwy 24R, 200-1 or STANDARD with minimum climb of 527 feet per NM to 1900′.



NOTE: Chart not to scale.

(NOTES CONTINUED ON FOLLOWING PAGE)

AMRST TWO DEPARTURE

TAKE-OFF OBSTACLES:

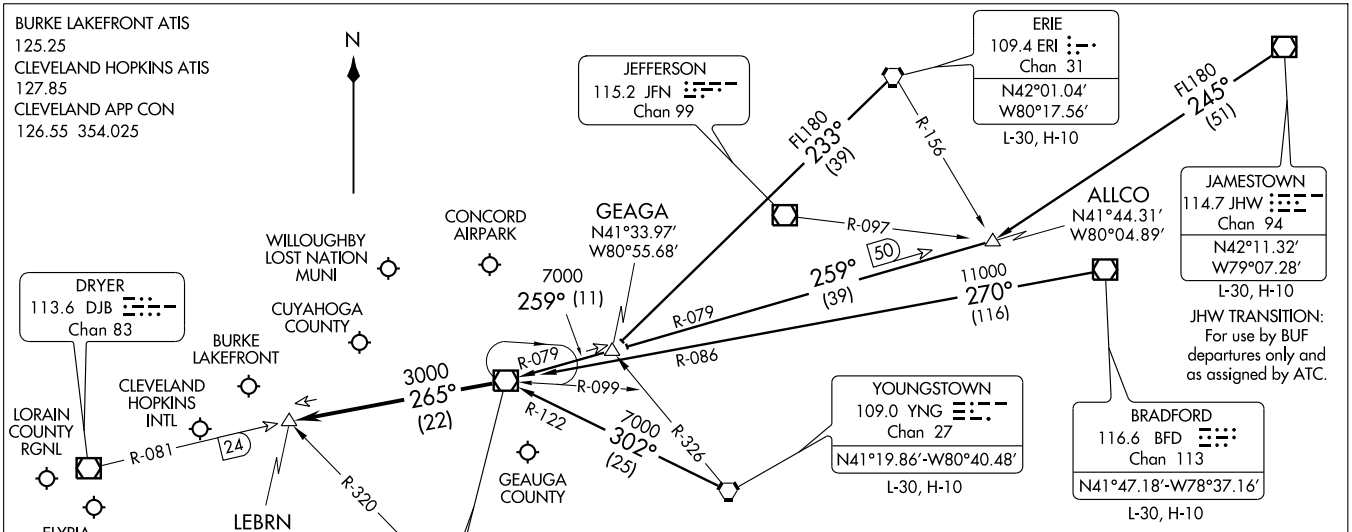
Rwy 6L: OL on Hanger 1127′ from DER, 780′ right of centerline, 575′ AGL/622′ MSL.
Tower 5589′ from DER, 1760′ right of centerline, 237′ AGL/857′ MSL.
Stacks 1.6 NM from DER, 883′ right of centerline, 312′ AGL/898′ MSL.

Rwy 6R: OL on WSK 166′ from DER, 241′ left of centerline, 21′ AGL/590′ MSL.
Stacks 1.8 NM from DER, 381′ right of centerline, 312′ AGL/898′ MSL.
Tower 5676′ from DER, 1999′ right of centerline, 108′ AGL/734′ MSL.
Tower 1.1 NM from DER, 1258′ right of centerline, 237′ AGL/857′ MSL.

Rwy 24L: Monument 1257′ from DER, 10′ left of centerline, 55′ AGL/630′ MSL.
Bridge 1.1 NM from DER, 2006′ left of centerline, 208′ AGL/792′ MSL.
Antenna 227′ from DER, 505′ left of centerline, 37′ AGL/608′ MSL.
Antenna on building 1529′ from DER, 2340′ left of centerline, 483′ AGL/1126′ MSL.
Building 2805′ from DER, 3340′ left of centerline, 949′ AGL/1603′ MSL.

Rwy 24R: Crane 2228′ from DER, 296′ left of centerline, 136′ AGL/707′ MSL.
Antenna 2783′ from DER, 1155′ left of centerline, 186′ AGL/764′ MSL.
Multiple bldgs 2787′ from DER, 3873′ left of centerline, up to 949′ AGL/1603′ MSL.
Antenna on bldg 1529′ from DER, 2839′ left of centerline, 483′ AGL/1126′ MSL.

CHARDON TWO ARRIVAL



VERTICAL NAVIGATION PLANNING INFORMATION

TURBOJETS: Expect clearance to cross at 10,000′ and 250 Kts.
PROPS: Expect clearance to cross at 9000′.

NOTE: RADAR Required.

NOTE: Chart not to scale.

ARRIVAL ROUTE DESCRIPTION

BRADFORD TRANSITION (BFD.CXR2): From over BFD VOR/DME via BFD R-270 and CXR R-086 to CXR VOR/DME. Thence . . . .

ERIE TRANSITION (ERI.CXR2): From over ERI VORTAC via ERI R-233 to GEAGA INT, then via CXR R-079 to CXR VOR/DME. Thence . . . .

JAMESTOWN TRANSITION (JHW.CXR2): (For use by BUF departures only and as assigned by ATC) From over JHW VOR/DME via JHW R-245 to ALLCO INT, then via CXR R-079 to CXR VOR/DME. Thence . . . .

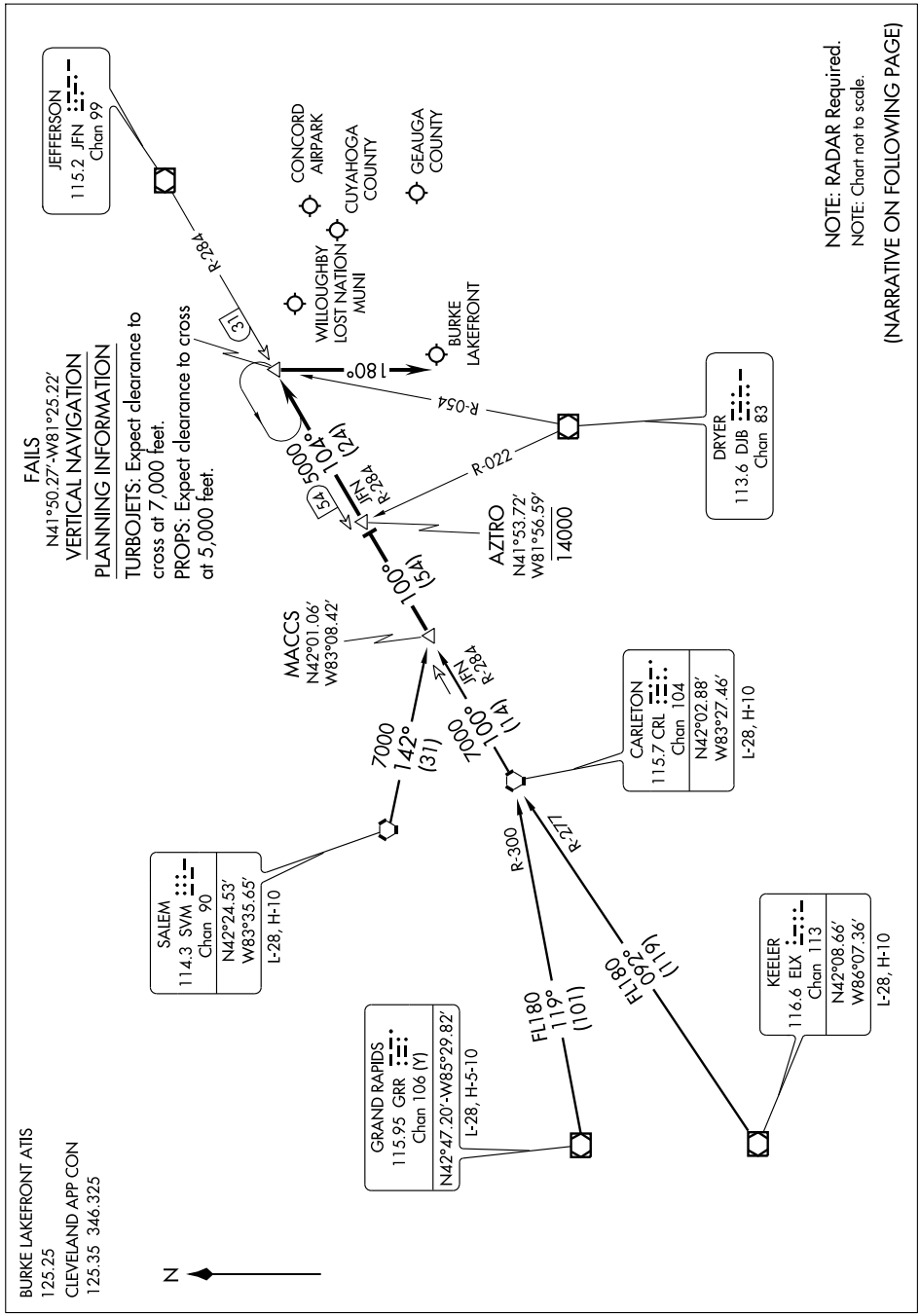
YOUNGSTOWN TRANSITION (YNG.CXR2): From over YNG VORTAC via YNG R-302 and CXR R-122 to CXR VOR/DME. Thence . . . .

. . . . From CXR VOR/DME via R-265 to LEBRN INT, expect vectors to final approach course.

FAILS ONE ARRIVAL

ST-5370 (FAA)

CLEVELAND, OHIO



ARRIVAL ROUTE DESCRIPTION

CARLETON TRANSITION (CRL.FAILS1): From over CRL VORTAC via CRL R-100 and JFN R-284 to MACCS INT. Thence. . . .
GRAND RAPIDS TRANSITION (GRR.FAILS1): From over GRR VOR/DME via GRR R-119 and CRL R-300 to CRL VORTAC, then via CRL R-100 and JFN R-284 to MACCS INT. Thence. . . .
KEELER TRANSITION (ELX.FAILS1): From over ELX VOR/DME via ELX R-092 and CRL R-277 to CRL VORTAC, then via CRL R-100 and JFN R-284 to MACCS INT. Thence. . . .
SALEM TRANSITION (SVM.FAILS1): From over SVM VORTAC via heading 142° to MACCS INT. Thence. . . .

. . . . From over MACCS INT, via CRL VORTAC R-100 to AZTRO INT, then via JFN VOR/DME R-284 to FAILS INT. From FAILS fly heading 180°.
Expect radar vectors to final approach course.

EC-2, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-BFT	APP CRS	Rwy ldg	24R	24L
109.75	245°	TDZE	583	583
Chan 34 (Y)		Apt Elev	583	583

ILS or LOC RWY 24R

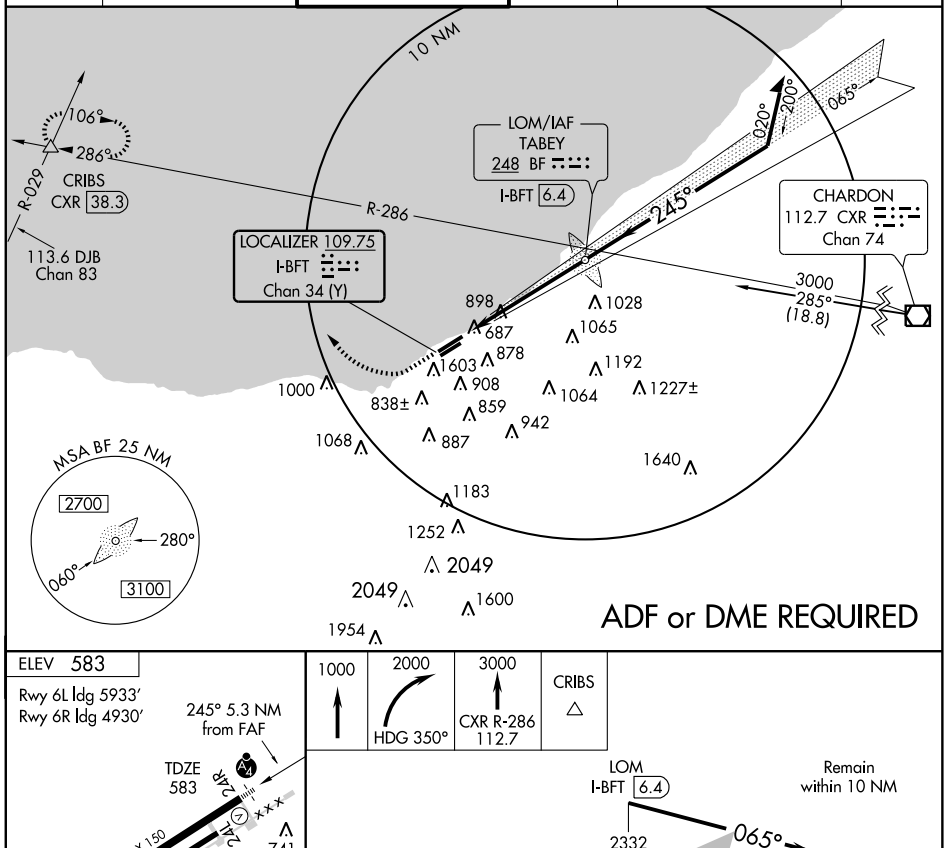
CLEVELAND / BURKE LAKEFRONT (BKL)

Circling not authorized SE of Rwy 6R-24L.
Inoperative table does not apply to S-LOC Cat C.
S-ILS minimums not authorized when control tower closed.

MALSF

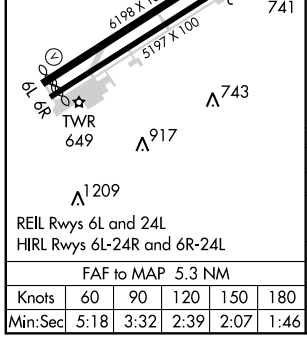
MISSED APPROACH: Climb to 1000, then climbing right turn to 2000 heading 350°, intercept CXR R-286 then climb to 3000 via CXR R-286 to CRIBS Int and hold.

ATIS	CLEVELAND APP CON	LAKEFRONT TOWER ★	GND CON	CLNC DEL	UNICOM
125.25	125.35 354.025	124.3 (CTAF) L 319.8	121.9	121.9 (when tower closed)	122.95



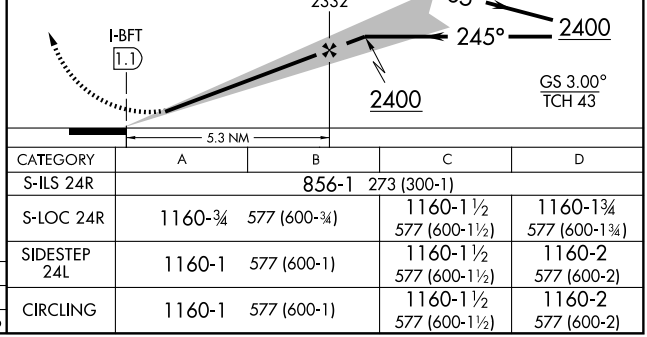
ELEV 583

Rwy 6L ldg 5933′
Rwy 6R ldg 4930′



REIL Rwys 6L and 24L
HIRL Rwys 6L-24R and 6R-24L

FAF to MAP 5.3 NM					
Knots	60	90	120	150	180
Min:Sec	5:18	3:32	2:39	2:07	1:46



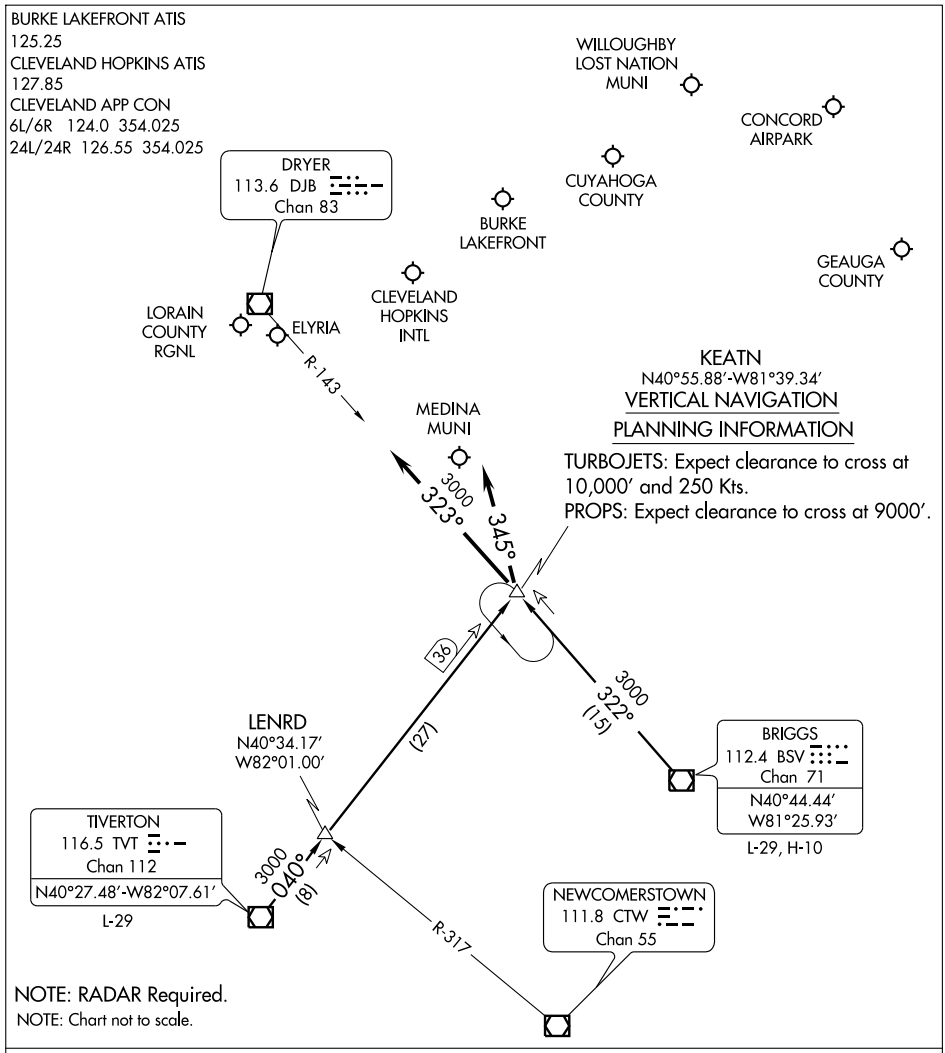
CATEGORY	A	B	C	D
S-ILS 24R	856-1 273 (300-1)			
S-LOC 24R	1160-¾ 577 (600-¾)		1160-1½ 577 (600-1½)	1160-1¾ 577 (600-1¾)
SIDESTEP 24L	1160-1 577 (600-1)		1160-1½ 577 (600-1½)	1160-2 577 (600-2)
CIRCLING	1160-1 577 (600-1)		1160-1½ 577 (600-1½)	1160-2 577 (600-2)

EC-2. 14 JAN 2010 to 11 FEB 2010

KEATN FOUR ARRIVAL

ST-84 (FAA)

CLEVELAND, OHIO



ARRIVAL ROUTE DESCRIPTION

BRIGGS TRANSITION (BSV.KEATN4): From over BSV VOR/DME via BSV R-322 to KEATN INT. Thence. . . .
TIVERTON TRANSITION (TVT.KEATN4): From over TVT VOR/DME via TVT R-040 to KEATN INT. Thence. . . .

LANDING CLE RWY 24L/R: . . . .Depart KEATN INT heading 345°. Expect radar vectors to final approach course.
LANDING CLE RWY 6L/R: . . . .Depart KEATN INT via DJB R-143 to DJB VOR/DME. Expect radar vectors to final approach course.
LANDING ALL OTHER AIRPORTS: . . . .From KEATN INT expect radar vectors to final approach course.

EC-2, 14 JAN 2010 to 11 FEB 2010

NDB BKL 416	APP CRS 245°	Rwy ldg 6198 TDZE 583 Apt Elev 584

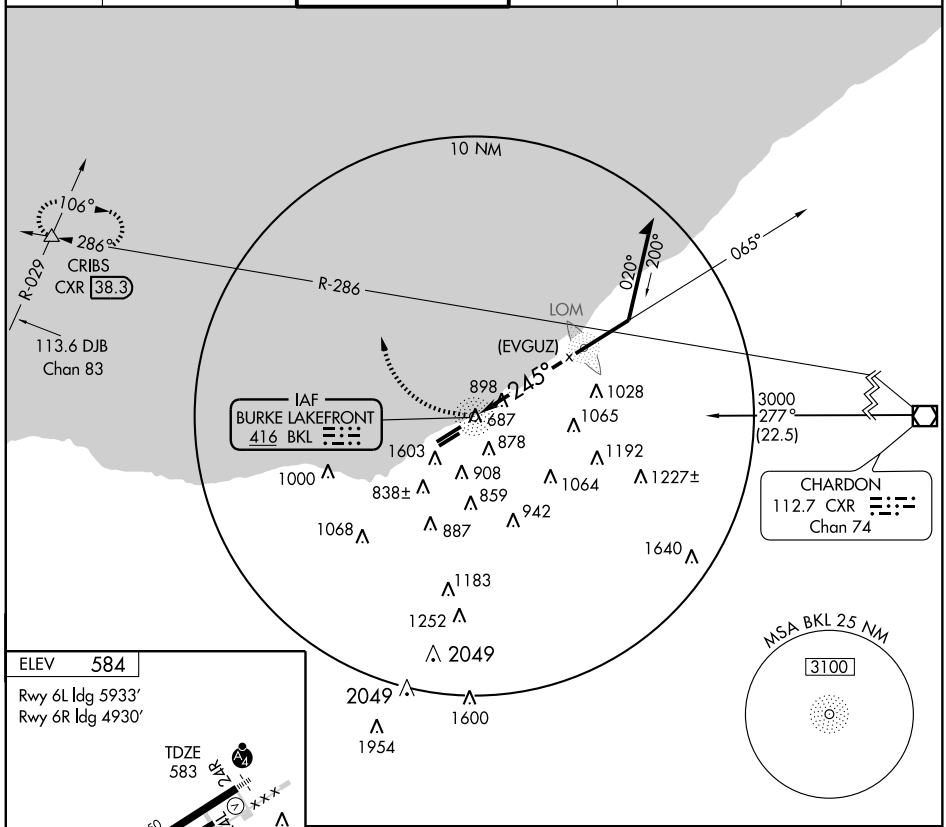
NDB or GPS RWY 24R
CLEVELAND / BURKE LAKEFRONT (BKL)

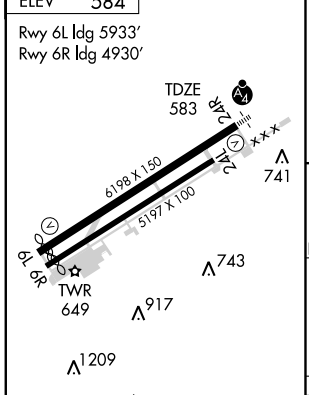
Circling NA southeast of Rwy 6R-24L.
Inoperative table does not apply.

MALSF

MISSED APPROACH: Climbing right turn to 2000 heading 350° to CXR R-286 then climb to 3000 via CXR R-286 to CRIBS Int and hold.

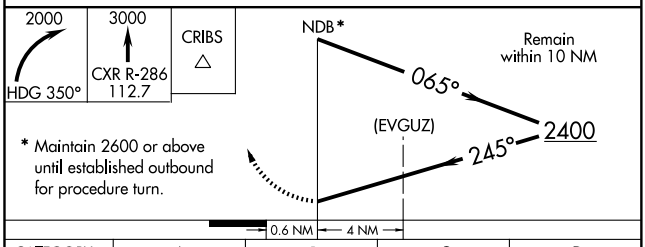
ATIS	CLEVELAND APP CON	LAKEFRONT TOWER ★	GND CON	CLNC DEL	UNICOM
125.25	125.35 354.025	124.3 (CTAF) L 319.8	121.9	121.9 (when tower closed)	122.95





REIL Rwys 6L and 24L
HIRL Rwys 6L-24R and 6R-24L

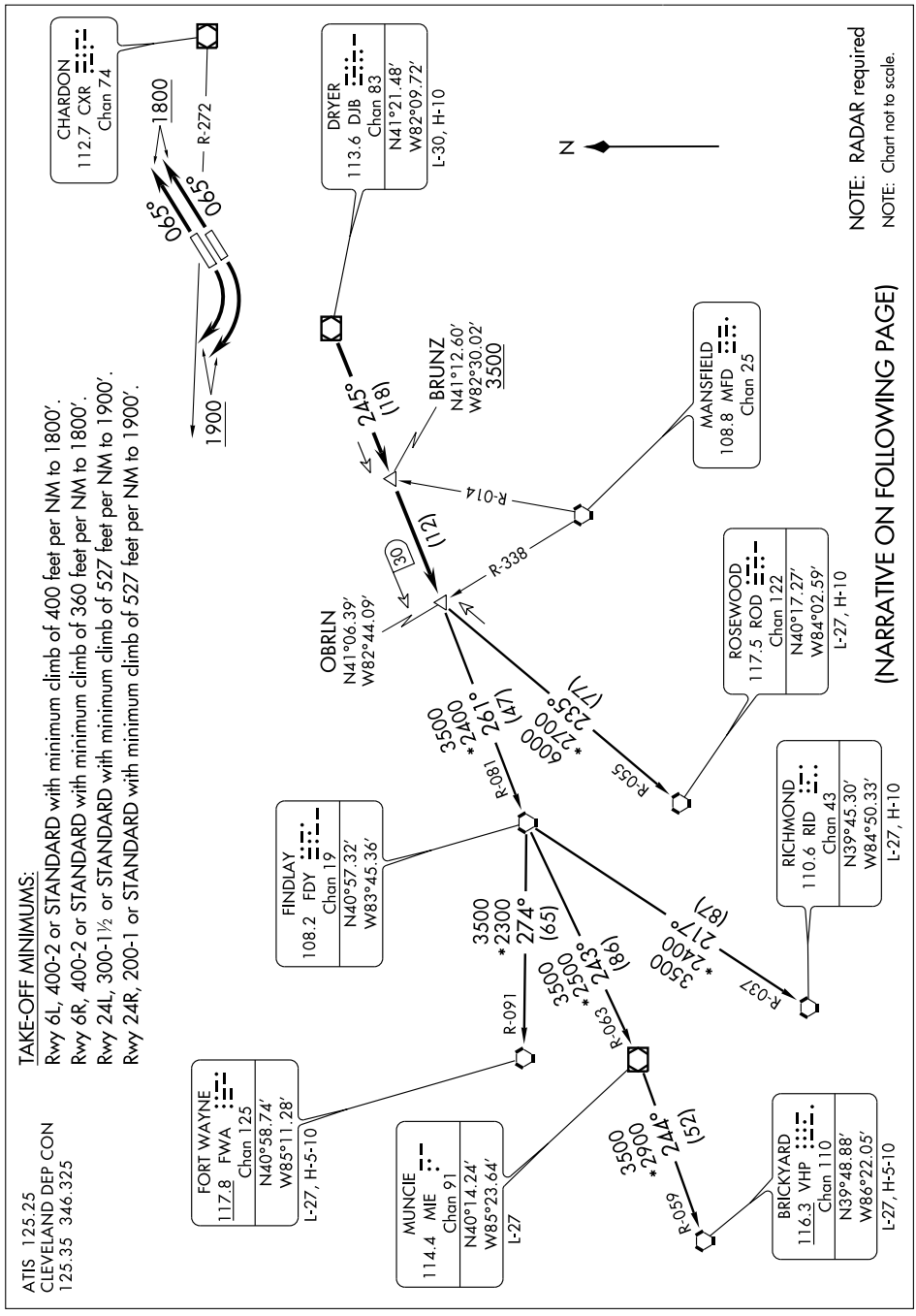
Knots	60	90	120	150	180
Min:Sec					



* Maintain 2600 or above until established outbound for procedure turn.

CATEGORY	A	B	C	D
S-24R	1400-1 817 (900-1)	1400-1¼ 817 (900-1¼)	1400-2½ 817 (900-2½)	1400-2¾ 817 (900-2¾)
CIRCLING	1400-1 817 (900-1)	1400-1¼ 817 (900-1¼)	1400-2½ 817 (900-2½)	1400-2¾ 817 (900-2¾)

OBRLN TWO DEPARTURE



OBRLN TWO DEPARTURE

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 6L: Climb via heading 065° to 1800 then via assigned heading to 3000 thence. . . .
TAKE-OFF RUNWAY 6R: Climb via heading 065° to 1800 then via assigned heading to 3000 thence. . . .
TAKE-OFF RUNWAYS 24R, 24L: Climbing right turn via CXR VOR/DME R-272 to 1900 then via assigned heading to 3000 thence. . . .

. . . . or assigned altitude for vectors to intercept the DJB VOR/DME R-245, cross BRUNZ INT at or above 3500 then proceed to OBRLN INT then via (transition). Expect filed altitude/flight level ten (10) minutes after departure.

BRICKYARD TRANSITION (OBRLN2.VHP): From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-243 and MIE R-063 to MIE VOR/DME, then via MIE R-244 and VHP R-059 to VHP VORTAC.
FORT WAYNE TRANSITION (OBRLN2.FWA): (For use by Fort Wayne arrivals only and ATC use as assigned.) From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-274 and FWA R-091 to FWA VORTAC.
MUNCIE TRANSITION (OBRLN2.MIE): (For use by Indianapolis arrivals only and ATC use as assigned). From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-243 and MIE R-063 to MIE VOR/DME.
RICHMOND TRANSITION (OBRLN2.RID): From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-217 and RID R-037 to RID VORTAC.
ROSEWOOD TRANSITION (OBRLN2.ROD): (For use at or below FL220 only and ATC use as assigned). From over OBRLN INT via ROD R-055 to ROD VORTAC.

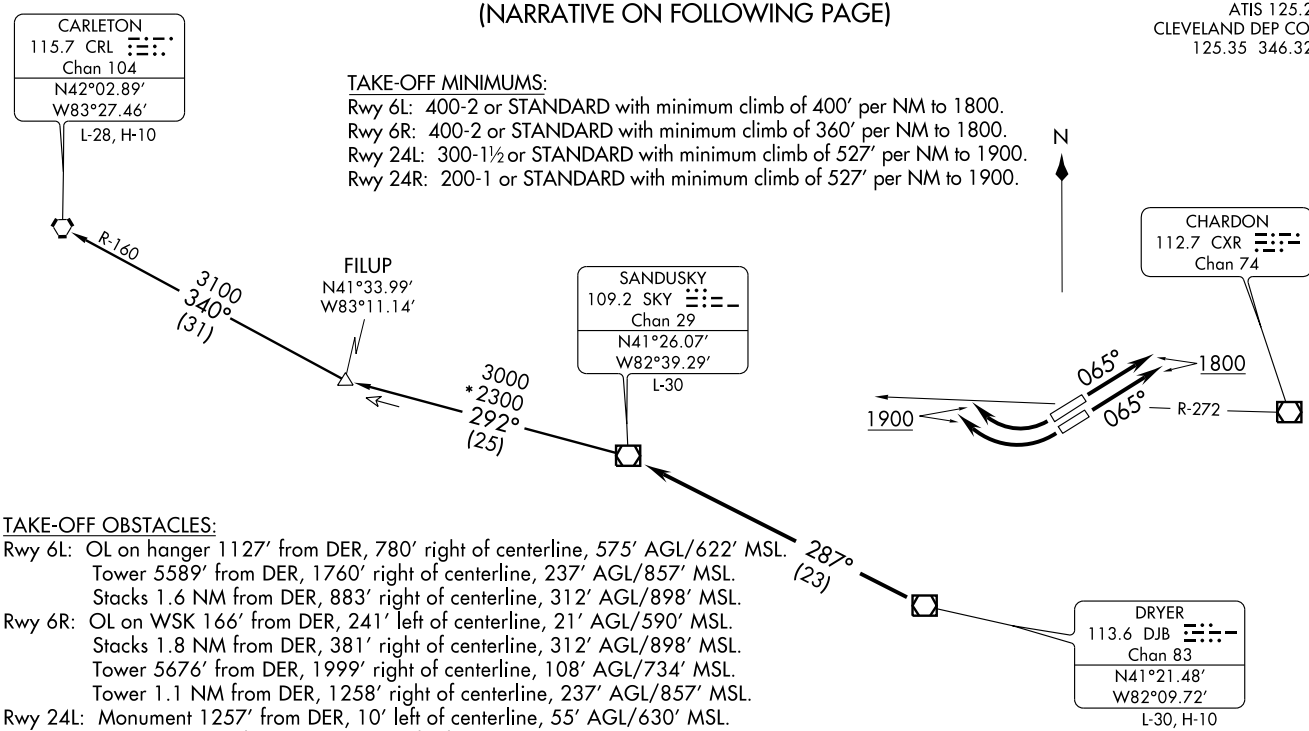
TAKE-OFF OBSTACLES:
Rwy 6L: OL on Hanger 1127′ from DER, 780′ right of centerline, 575′ AGL/622′ MSL.
Tower 5589′ from DER, 1760′ right of centerline, 237′ AGL/857′ MSL.
Stacks 1.6 NM from DER, 883′ right of centerline, 312′ AGL/898′ MSL.
Rwy 6R: OL on WSK 166′ from DER, 241′ left of centerline, 21′ AGL/590′ MSL.
Stacks 1.8 NM from DER, 381′ right of centerline, 312′ AGL/898′ MSL.
Tower 5676′ from DER, 1999′ right of centerline, 108′ AGL/734′ MSL.
Tower 1.1 NM from DER, 1258′ right of centerline, 237′ AGL/857′ MSL.
Rwy 24L: Monument 1257′ from DER, 10′ left of centerline, 55′ AGL/630′ MSL.
Bridge 1.1 NM from DER, 2006′ left of centerline, 208′ AGL/792′ MSL.
Antenna 227′ from DER, 505′ left of centerline, 37′ AGL/608′ MSL.
Antenna on building 1529′ from DER, 2340′ left of centerline, 483′ AGL/1126′ MSL.
Building 2805′ from DER, 3340′ left of centerline, 949′ AGL/1603′ MSL.
Rwy 24R: Crane 2228′ from DER, 296′ left of centerline, 136′ AGL/707′ MSL.
Antenna 2783′ from DER, 1155′ left of centerline, 186′ AGL/764′ MSL.
Multiple bldgs 2787′ from DER, 3873′ left of centerline, up to 949′ AGL/1603′ MSL.
Antenna on bldg 1529′ from DER, 2839′ left of centerline, 483′ AGL/1126′ MSL.

EC-2, 14 JAN 2010 to 11 FEB 2010

(NARRATIVE ON FOLLOWING PAGE)

ATIS 125.25
CLEVELAND DEP CON
125.35 346.325

TAKE-OFF MINIMUMS:
Rwy 6L: 400-2 or STANDARD with minimum climb of 400′ per NM to 1800.
Rwy 6R: 400-2 or STANDARD with minimum climb of 360′ per NM to 1800.
Rwy 24L: 300-1½ or STANDARD with minimum climb of 527′ per NM to 1900.
Rwy 24R: 200-1 or STANDARD with minimum climb of 527′ per NM to 1900.



TAKE-OFF OBSTACLES:
Rwy 6L: OL on hanger 1127′ from DER, 780′ right of centerline, 575′ AGL/622′ MSL.
Tower 5589′ from DER, 1760′ right of centerline, 237′ AGL/857′ MSL.
Stacks 1.6 NM from DER, 883′ right of centerline, 312′ AGL/898′ MSL.
Rwy 6R: OL on WSK 166′ from DER, 241′ left of centerline, 21′ AGL/590′ MSL.
Stacks 1.8 NM from DER, 381′ right of centerline, 312′ AGL/898′ MSL.
Tower 5676′ from DER, 1999′ right of centerline, 108′ AGL/734′ MSL.
Tower 1.1 NM from DER, 1258′ right of centerline, 237′ AGL/857′ MSL.
Rwy 24L: Monument 1257′ from DER, 10′ left of centerline, 55′ AGL/630′ MSL.
Bridge 1.1 NM from DER, 2006′ left of centerline, 208′ AGL/792′ MSL.
Antenna 227′ from DER, 505′ left of centerline, 37′ AGL/608′ MSL.
Antenna on building 1529′ from DER, 2340′ left of centerline, 483′ AGL/1126′ MSL.
Building 2805′ from DER, 3340′ left of centerline, 949′ AGL/1603′ MSL.
Rwy 24R: Crane 2228′ from DER, 296′ left of centerline, 136′ AGL/707′ MSL.
Antenna 2783′ from DER, 1155′ left of centerline, 186′ AGL/764′ MSL.
Multiple bldgs 2787′ from DER, 3873′ left of centerline, up to 949′ AGL/1603′ MSL.
Antenna on bldg 1529′ from DER, 2839′ left of centerline, 483′ AGL/1126′ MSL.

NOTE: RADAR required
NOTE: Turboprop aircraft only
NOTE: Chart not to scale.

(SKY2.SKY) 09183

SANDUSKY TWO DEPARTURE

SL-5370 (FAA)

CLEVELAND/BURKE LAKEFRONT (BKL)
CLEVELAND, OHIO

SANDUSKY TWO DEPARTURE

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 6L, 6R: Climb via heading 065° to 1800 then via assigned heading to 3000 thence. . . .

TAKE-OFF RUNWAYS 24R, 24L: Climbing right turn via CXR VOR/DME R-272 to 1900 then via assigned heading to 3000 thence. . . .

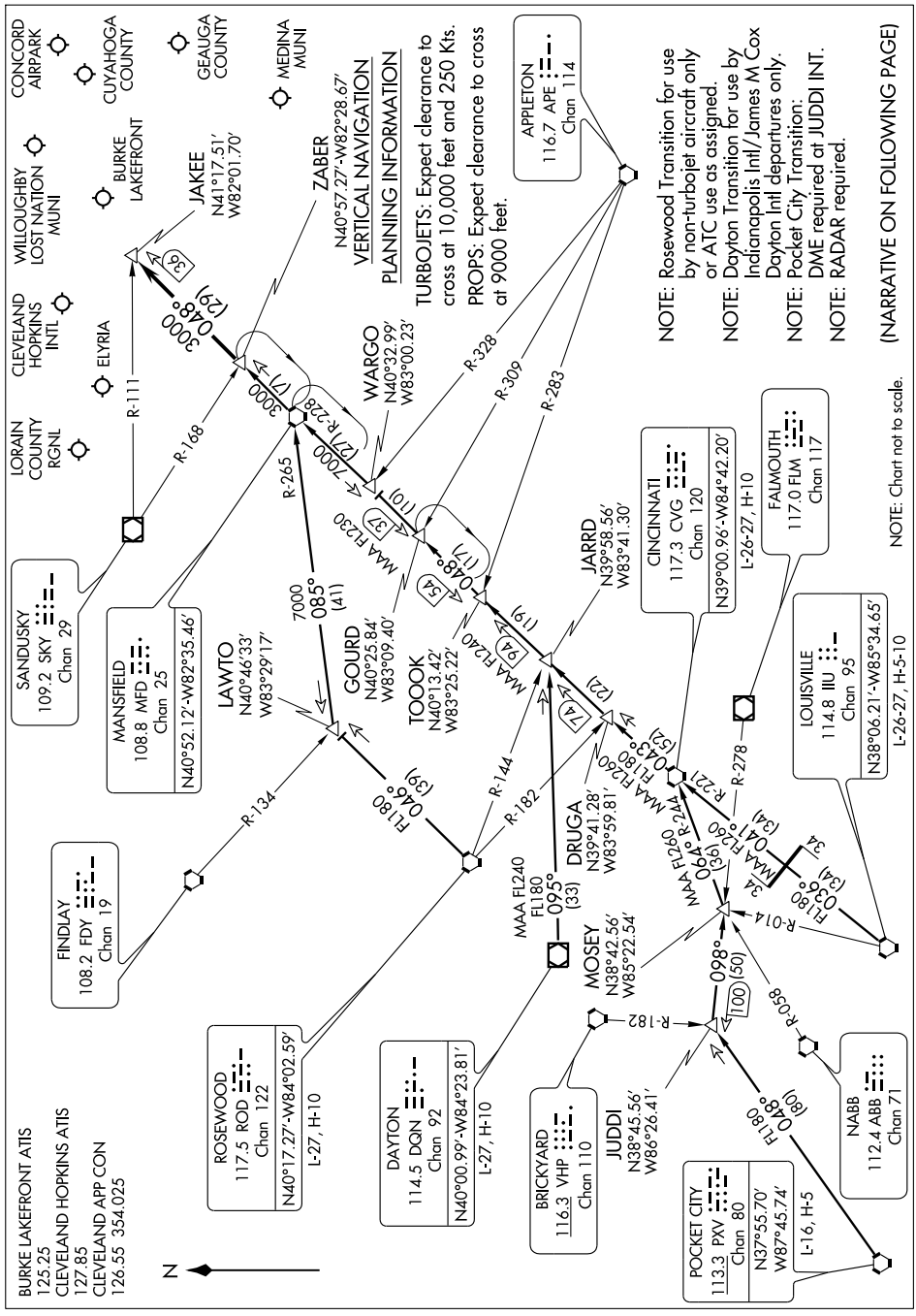
. . . . or assigned altitude for vectors to intercept the DJB VOR/DME R-287 to SKY VOR/DME. Expect filed altitude/flight level ten (10) minutes after departure.

CARLETON TRANSITION (SKY2.CRL): From over SKY VOR/DME via SKY R-292 to FILUP INT, then via CRL R-160 to CRL VORTAC.

ZABER ONE ARRIVAL

ST-84 (FAA)

CLEVELAND, OHIO



ARRIVAL ROUTE DESCRIPTION

CINCINNATI TRANSITION (CVG.ZABER1): From over CVG VORTAC via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

DAYTON TRANSITION (DQN.ZABER1): (For use by INDIANAPOLIS INTL/JAMES M COX DAYTON INTL departures only). From over DQN VOR/DME via DQN R-095 to JARRD INT, then via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

LOUISVILLE TRANSITION (IIU.ZABER1): From over IIU VORTAC via IIU R-036 and CVG R-221 to CVG VORTAC, then via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

POCKET CITY TRANSITION (PXV.ZABER1): (DME REQUIRED at JUDDI INT) From over PXV VORTAC via PXV R-048 to JUDDI INT, then via FLM R-278 to MOSEY INT, then via CVG R-244 to CVG VORTAC, then via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

ROSEWOOD TRANSITION (ROD.ZABER1): (For use by non-turbo aircraft only or ATC use as assigned). From over ROD VORTAC via ROD R-046 to LAWTO INT, then via MFD R-265 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

. . . . From over ZABER INT via MFD R-048 to JAKEE INT. Expect radar vectors to final approach course.

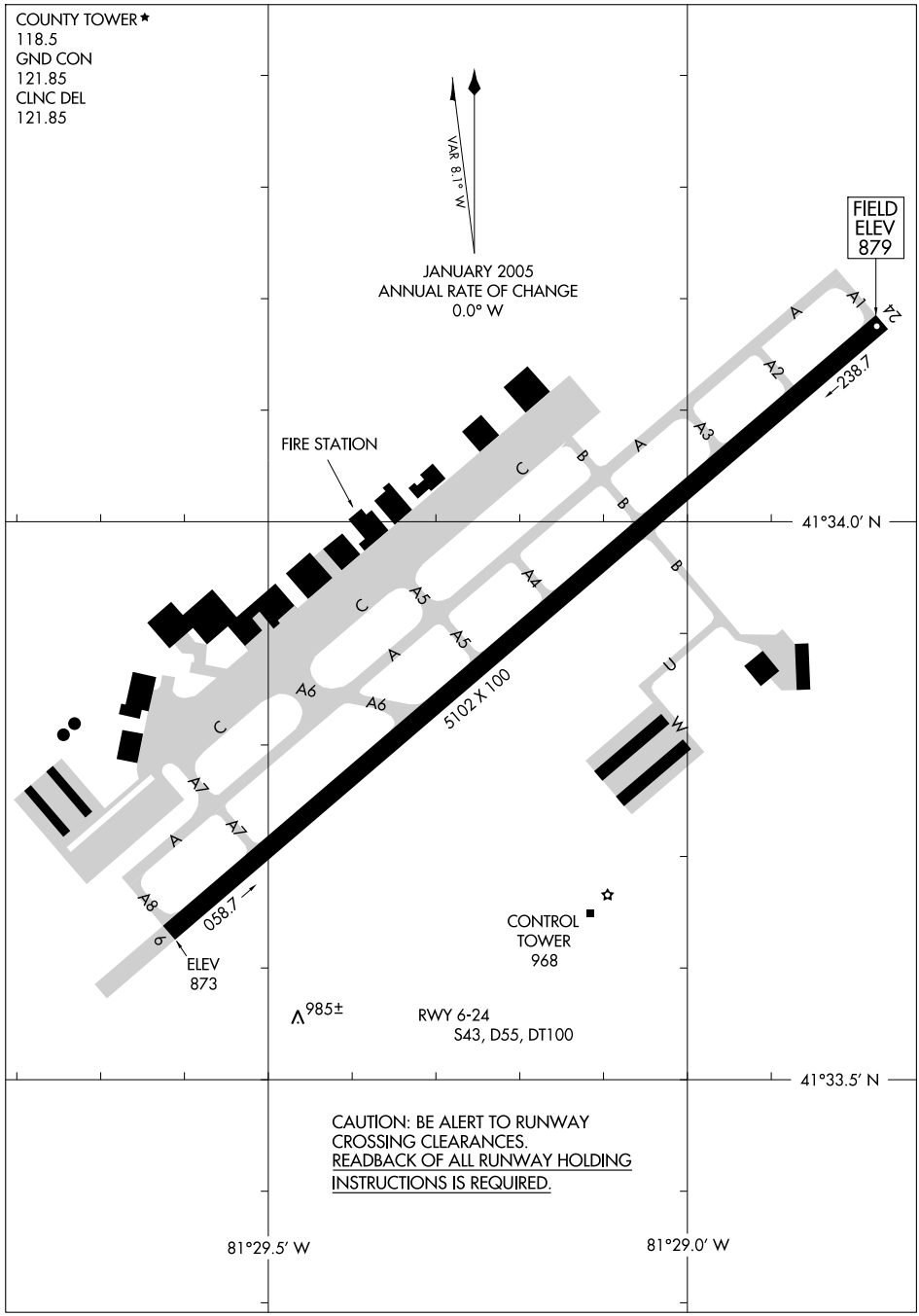
EC-2, 14 JAN 2010 to 11 FEB 2010

08269

AIRPORT DIAGRAM

AL-5027 (FAA)

CLEVELAND / CUYAHOGA COUNTY (CGF)
CLEVELAND, OHIO



EC-2, 14 JAN 2010 to 11 FEB 2010

CLEVELAND DEP CON
125.35 346.325

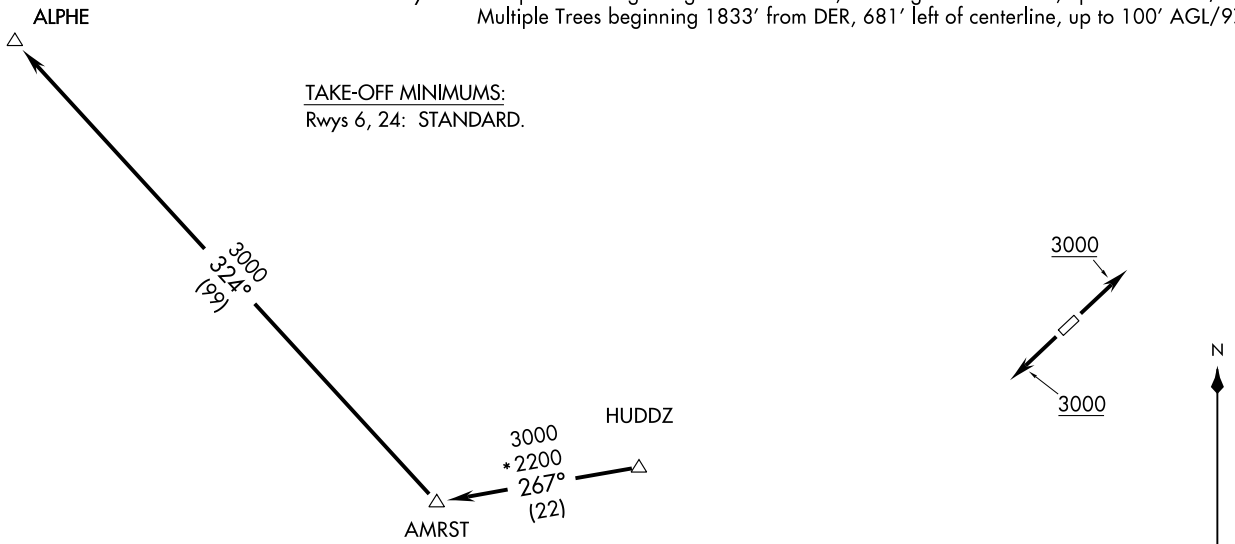
DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 6, 24: Climb via assigned heading to 3000 thence. . . .

. . . . or assigned altitude for radar vectors to HUDDZ, then via 267° track to AMRST, then via 324° track to ALPHE. Expect filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES:
Rwy 6: Trees beginning 2127′ from DER, 975′ right of centerline, up to 109′ AGL/982′ MSL.
Tree 2595′ from DER, 740′ left of centerline, 93′ AGL/947′ MSL.
Rwy 24: Multiple Trees beginning 755′ from DER, 658′ right of centerline, up to 100′ AGL/948′ MSL.
Multiple Trees beginning 1833′ from DER, 681′ left of centerline, up to 100′ AGL/974′ MSL.

TAKE-OFF MINIMUMS:
Rwys 6, 24: STANDARD.



NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: RADAR REQUIRED

NOTE: Chart not to scale.

(ALPHE2.ALPHE) 09295

ALPHE TWO DEPARTURE (RNAV)

SL-5027 (FAA)

CLEVELAND / CUYAHOGA COUNTY (CGF)
CLEVELAND, OHIO

CLEVELAND DEP CON
125.35 346.325

TAKE-OFF MINIMUMS:
Rwys 6, 24: STANDARD.

NOTE: RADAR REQUIRED

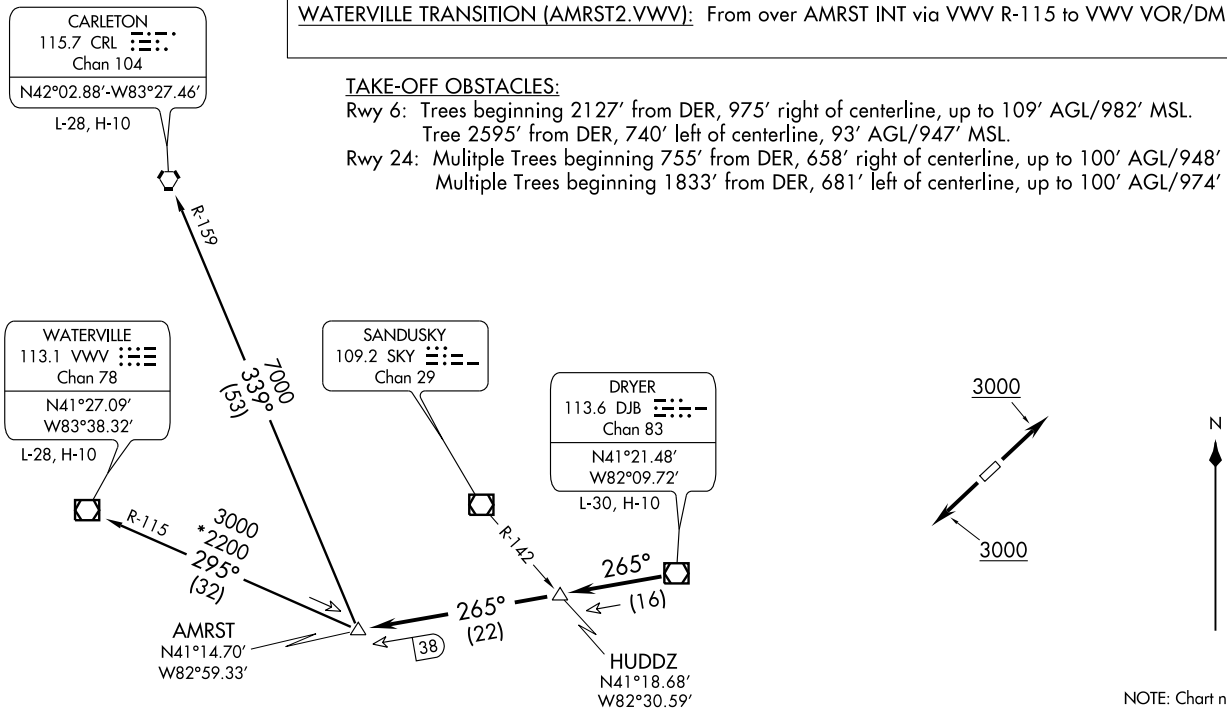
DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 6, 24: Climb via assigned heading to 3000 thence. . . .

. . . . or assigned altitude for vectors to intercept the DJB VOR/DME R-265 to AMRST INT then via (Transition). Expect filed altitude/flight level ten (10) minutes after departure.

CARLETON TRANSITION (AMRST2.CRL): From over AMRST INT via CRL R-159 to CRL VORTAC.
WATERVILLE TRANSITION (AMRST2.VWV): From over AMRST INT via VWV R-115 to VWV VOR/DME.

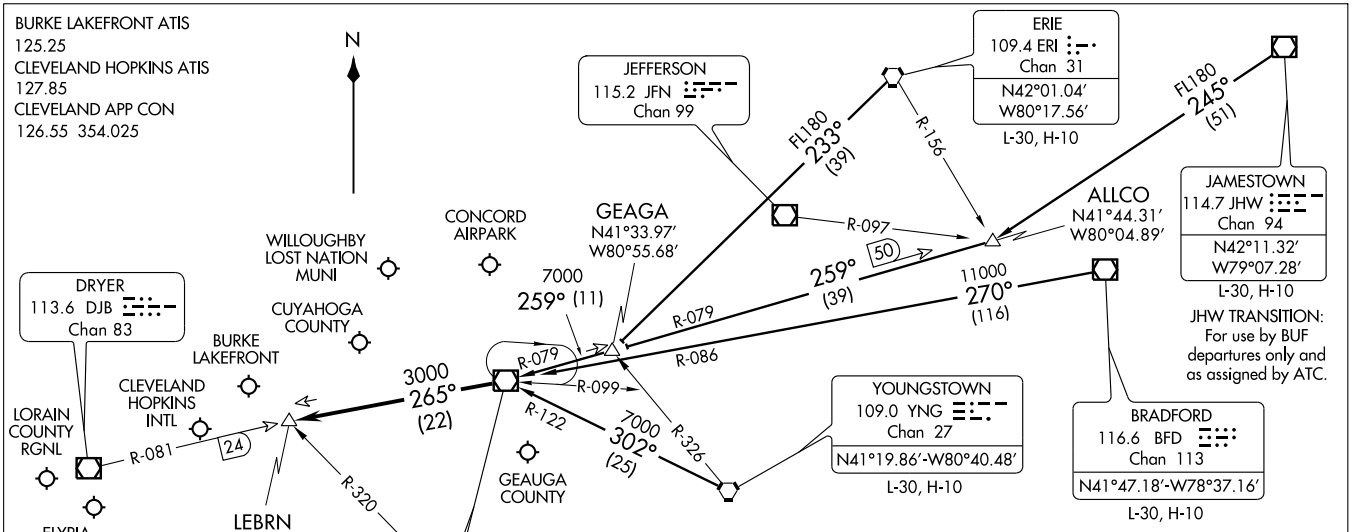
TAKE-OFF OBSTACLES:
Rwy 6: Trees beginning 2127′ from DER, 975′ right of centerline, up to 109′ AGL/982′ MSL.
Tree 2595′ from DER, 740′ left of centerline, 93′ AGL/947′ MSL.
Rwy 24: Mulitple Trees beginning 755′ from DER, 658′ right of centerline, up to 100′ AGL/948′ MSL.
Multiple Trees beginning 1833′ from DER, 681′ left of centerline, up to 100′ AGL/974′ MSL.



NOTE: Chart not to scale.

AMRST TWO DEPARTURE
(AMRST2.AMRST) 09183
SL-5027 (FAA)
CLEVELAND / CUYAHOGA COUNTY (CGF)
CLEVELAND, OHIO

CHARDON TWO ARRIVAL



VERTICAL NAVIGATION PLANNING INFORMATION

TURBOJETS: Expect clearance to cross at 10,000′ and 250 Kts.
PROPS: Expect clearance to cross at 9000′.

NOTE: RADAR Required.

NOTE: Chart not to scale.

ARRIVAL ROUTE DESCRIPTION

BRADFORD TRANSITION (BFD.CXR2): From over BFD VOR/DME via BFD R-270 and CXR R-086 to CXR VOR/DME. Thence . . . .

ERIE TRANSITION (ERI.CXR2): From over ERI VORTAC via ERI R-233 to GEAGA INT, then via CXR R-079 to CXR VOR/DME. Thence . . . .

JAMESTOWN TRANSITION (JHW.CXR2): (For use by BUF departures only and as assigned by ATC) From over JHW VOR/DME via JHW R-245 to ALLCO INT, then via CXR R-079 to CXR VOR/DME. Thence . . . .

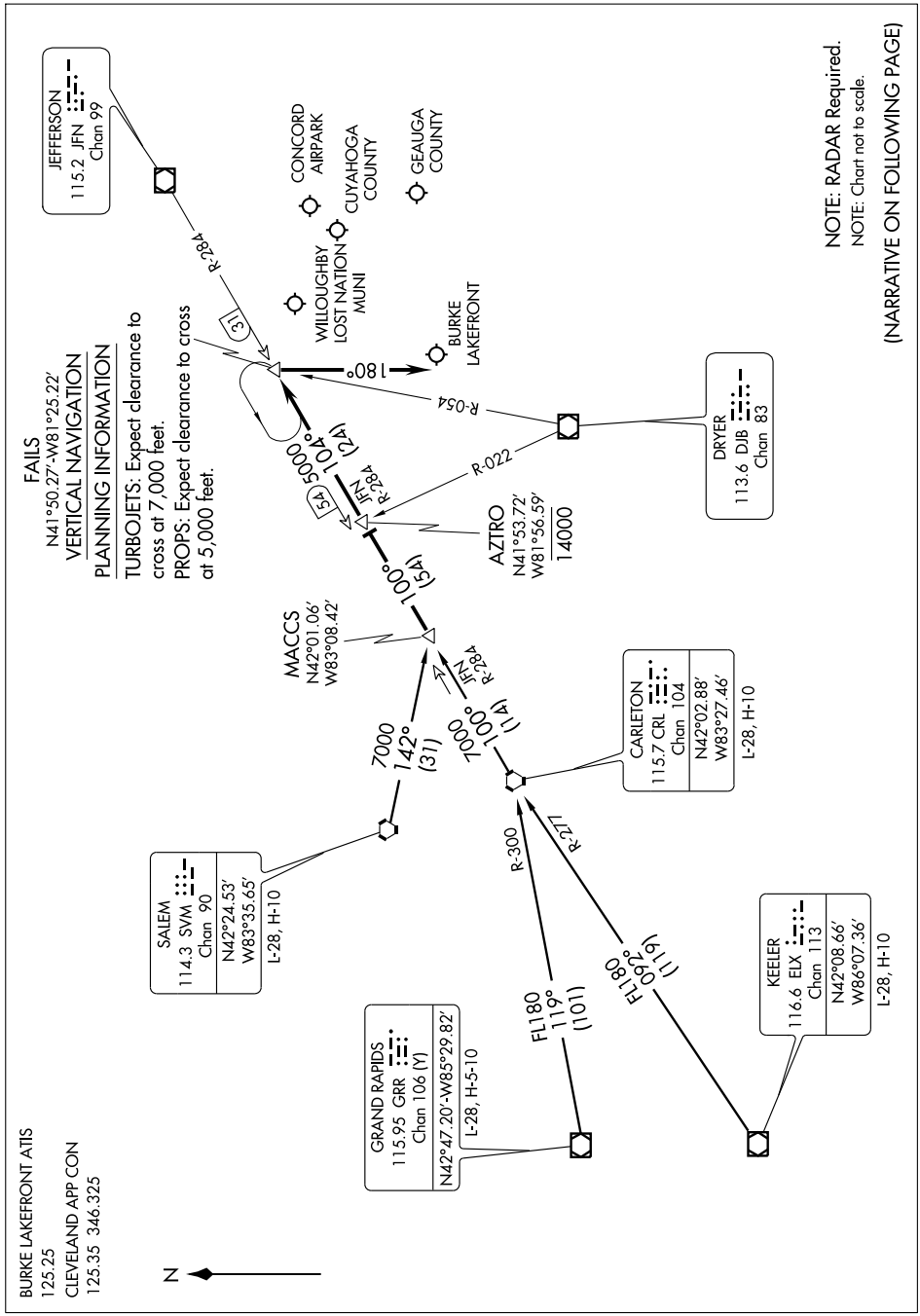
YOUNGSTOWN TRANSITION (YNG.CXR2): From over YNG VORTAC via YNG R-302 and CXR R-122 to CXR VOR/DME. Thence . . . .

. . . . From CXR VOR/DME via R-265 to LEBRN INT, expect vectors to final approach course.

FAILS ONE ARRIVAL

ST-5370 (FAA)

CLEVELAND, OHIO



ARRIVAL ROUTE DESCRIPTION

CARLETON TRANSITION (CRL.FAILS1): From over CRL VORTAC via CRL R-100 and JFN R-284 to MACCS INT. Thence. . . .
GRAND RAPIDS TRANSITION (GRR.FAILS1): From over GRR VOR/DME via GRR R-119 and CRL R-300 to CRL VORTAC, then via CRL R-100 and JFN R-284 to MACCS INT. Thence. . . .
KEELER TRANSITION (ELX.FAILS1): From over ELX VOR/DME via ELX R-092 and CRL R-277 to CRL VORTAC, then via CRL R-100 and JFN R-284 to MACCS INT. Thence. . . .
SALEM TRANSITION (SVM.FAILS1): From over SVM VORTAC via heading 142° to MACCS INT. Thence. . . .

. . . . From over MACCS INT, via CRL VORTAC R-100 to AZTRO INT, then via JFN VOR/DME R-284 to FAILS INT. From FAILS fly heading 180°.
Expect radar vectors to final approach course.

EC-2, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-CGF 111.1 Chan 48	APP CRS 237°	Rwy ldg 5102 TDZE 879 Apt Elev 879

ILS or LOC RWY 24

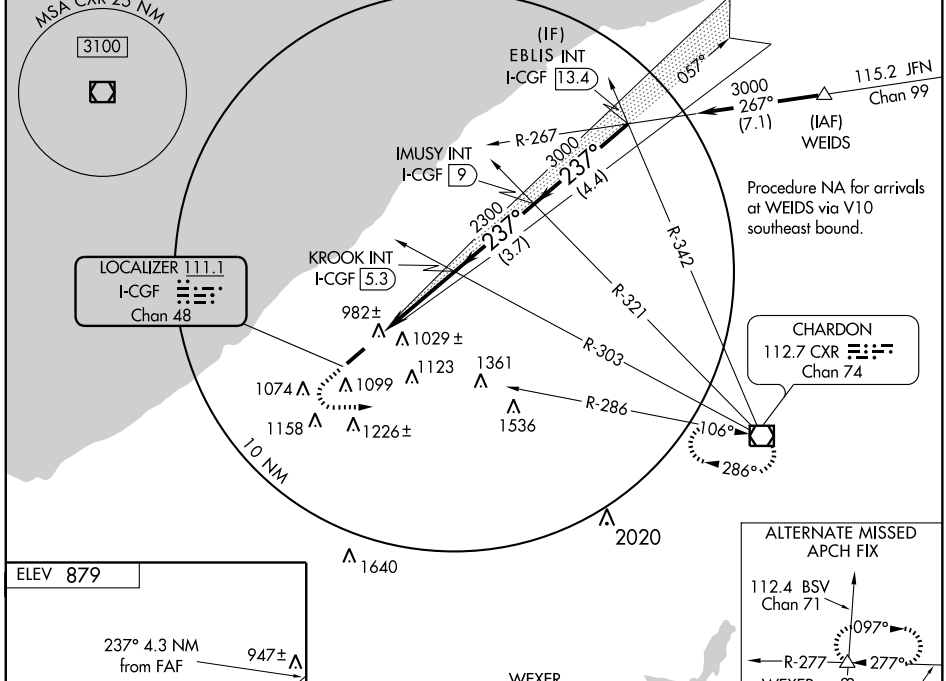
CLEVELAND/CUYAHOGA COUNTY (CGF)

For inoperative MALSR, increase S-LOC 24 Cat A/B/C visibility to 1 mile. Visibility reduction by helicopters NA. For inoperative MALSR, when using Cleveland-Hopkins Intl altimeter setting, increase S-ILS 24 all Cats visibility to 1¼ mile and S-LOC 24 Cat A/B visibility to 1 mile. When local altimeter setting not received, use Cleveland-Hopkins Intl altimeter setting and increase DA 56 feet, and all MDA 60 feet. Increase circling Cat C visibility ¼ mile. VDP NA when using Cleveland-Hopkins Intl altimeter setting.

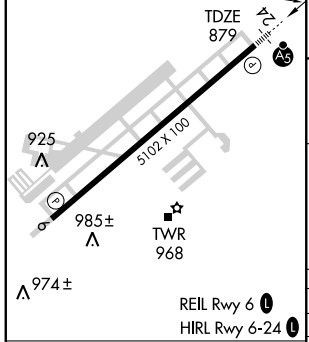
MALSR

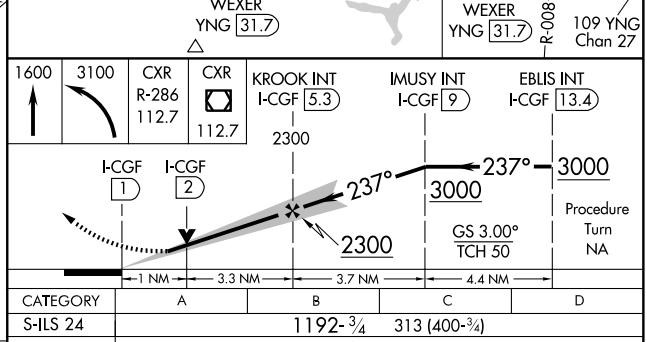
MISSED APPROACH: Climb to 1600, then climbing left turn to 3100 via CXR VOR/DME R-286 to CXR VOR/DME and hold.

CLEVELAND APP CON	COUNTY TOWER★	GND CON	CLNC DEL	UNICOM
125.35 354.025	118.5 (CTAF) L	121.85	121.85	122.95



ELEV 879





FAF to MAP 4.3 NM					
Knots	60	90	120	150	180
Min:Sec	4:18	2:52	2:09	1:43	1:26

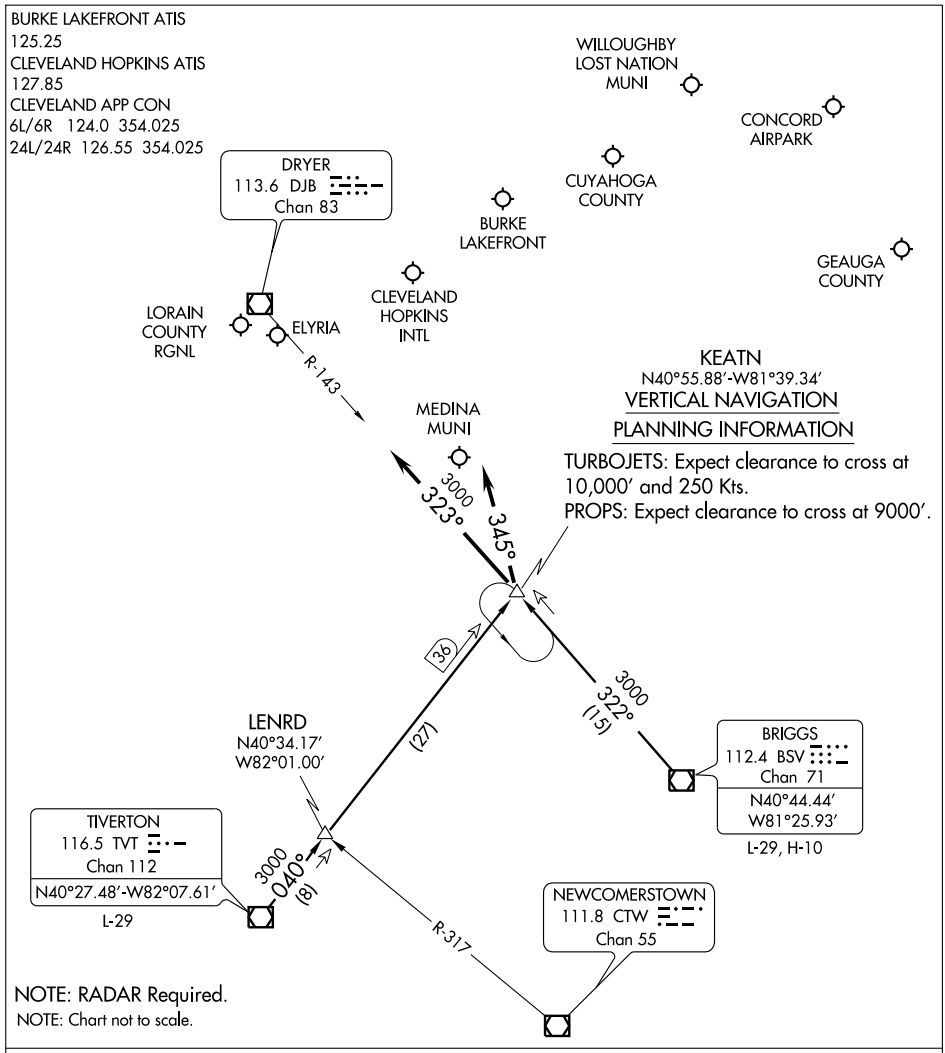
CATEGORY	A	B	C	D
S-ILS 24	1192-¾ 313 (400-¾)			
S-LOC 24	1240-¾ 361 (400-¾)			
CIRCLING	1400-1 521 (600-1)	1420-1 541 (600-1)	1420-1½ 541 (600-1½)	1480-2 601 (700-2)

EC-2. 14 JAN 2010 to 11 FEB 2010

KEATN FOUR ARRIVAL

ST-84 (FAA)

CLEVELAND, OHIO



ARRIVAL ROUTE DESCRIPTION

BRIGGS TRANSITION (BSV.KEATN4): From over BSV VOR/DME via BSV R-322 to KEATN INT. Thence. . . .
TIVERTON TRANSITION (TVT.KEATN4): From over TVT VOR/DME via TVT R-040 to KEATN INT. Thence. . . .

LANDING CLE RWY 24L/R: . . . .Depart KEATN INT heading 345°. Expect radar vectors to final approach course.
LANDING CLE RWY 6L/R: . . . .Depart KEATN INT via DJB R-143 to DJB VOR/DME. Expect radar vectors to final approach course.
LANDING ALL OTHER AIRPORTS: . . . .From KEATN INT expect radar vectors to final approach course.

EC-2, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-CGF 111.1 Chan 48	APP CRS 057°	Rwy ldg 5102 TDZE 873 Apt Elev 879

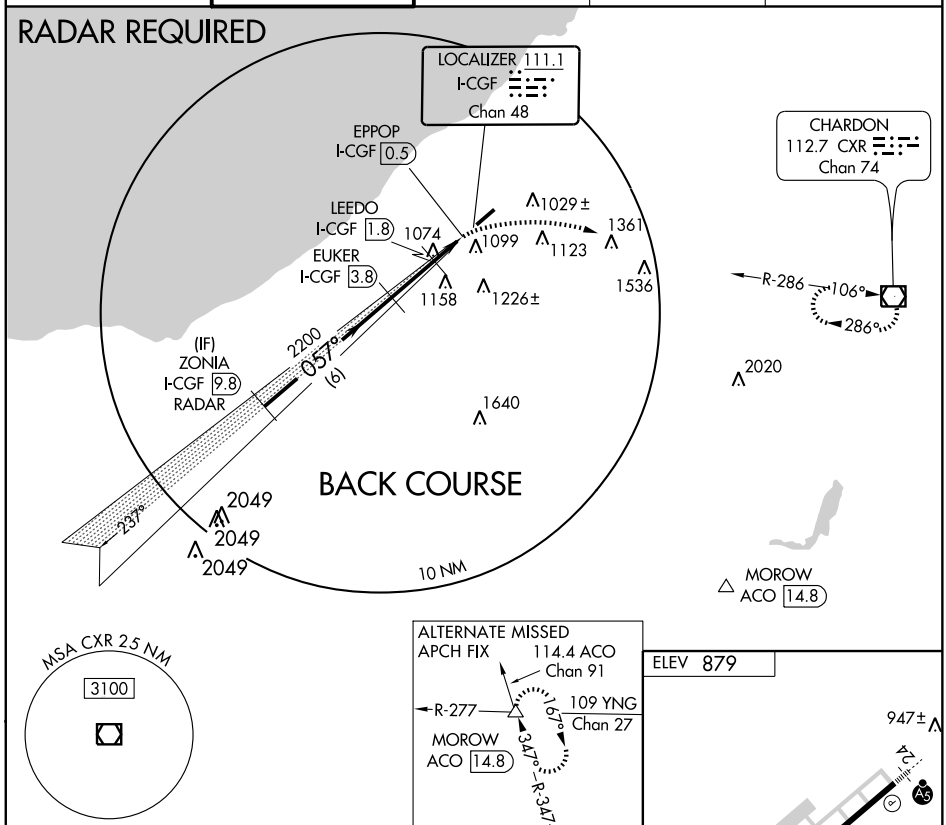
LOC/DME BC RWY 6

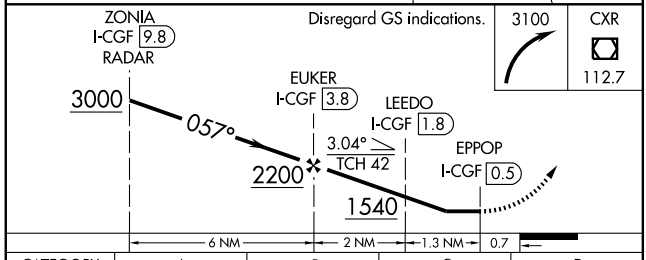
CLEVELAND/CUYAHOGA COUNTY (CGF)

Visibility reduction by helicopters NA. When local altimeter setting not received, use Cleveland-Hopkins Intl altimeter setting and increase all MDA 60 feet and S-6 Cat D and circling Cat C visibility ¼ mile.

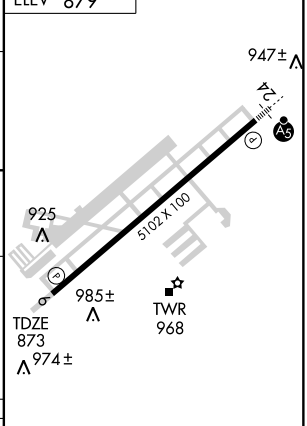
MISSED APPROACH: Climbing right turn to 3100 direct CXR VOR/DME and hold.

CLEVELAND APP CON	COUNTY TOWER★	GND CON	CLNC DEL	UNICOM
125.35 354.025	118.5 (CTAF) L	121.85	121.85	122.95





CATEGORY	A	B	C	D
S-6	1380-1 507 (600-1)		1380-1½ 507 (600-1½)	
CIRCLING	1400-1 521 (600-1)	1420-1 541 (600-1)	1420-1½ 541 (600-1½)	1480-2 601 (700-2)

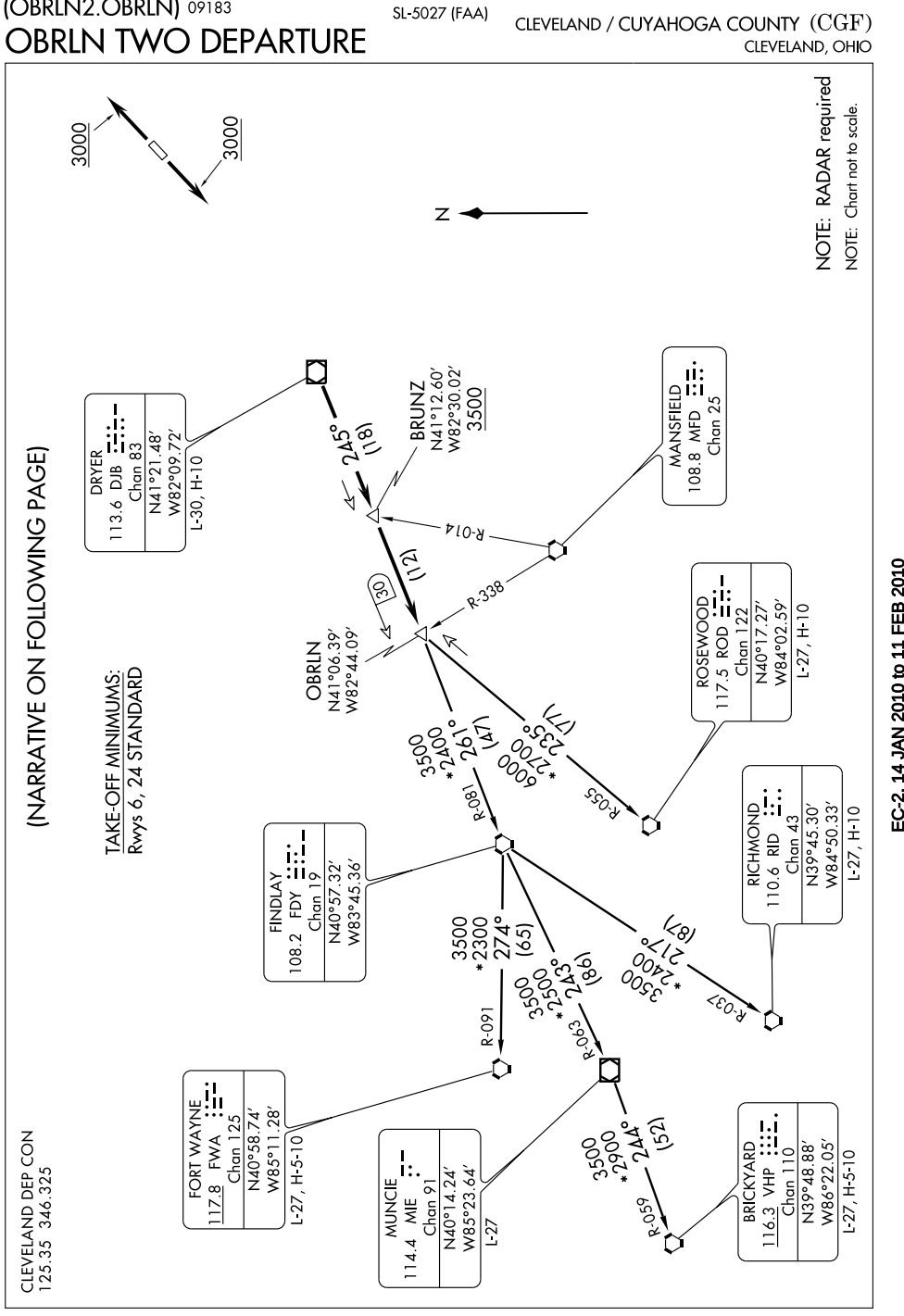


REIL Rwy 6 L
HIRL Rwy 6-24 L

EC-2, 14 JAN 2010 to 11 FEB 2010

OBRLN TWO DEPARTURE

CLEVELAND, OHIO



OBRLN TWO DEPARTURE

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 6, 24: Climb via assigned heading to 3000 thence. . .

. . . or assigned altitude for vectors to intercept DJB VOR/DME R-245, cross BRUNZ INT at or above 3500 then proceed to OBRLN INT then via (transition). Expect filed altitude/flight level ten (10) minutes after departure.

BRICKYARD TRANSITION (OBRLN2.VHP): From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-243 and MIE R-063 to MIE VOR/DME, then via MIE R-244 and VHP R-059 to VHP VORTAC.
FORT WAYNE TRANSITION (OBRLN2.FWA): (For use by Fort Wayne arrivals only and ATC use as assigned.) From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-274 and FWA R-091 to FWA VORTAC.
MUNCIE TRANSITION (OBRLN2.MIE): (For use by Indianapolis arrivals only and ATC use as assigned). From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-243 and MIE R-063 to MIE VOR/DME.
RICHMOND TRANSITION (OBRLN2.RID): From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-217 and RID R-037 to RID VORTAC.
ROSEWOOD TRANSITION (OBRLN2.ROD): (For use at or below FL220 only and ATC use as assigned). From over OBRLN INT via ROD R-055 to ROD VORTAC.

TAKE-OFF OBSTACLES:
Rwy 6: Trees beginning 2127′ from DER, 975′ right of centerline, up to 109′ AGL/982′ MSL.
Tree 2595′ from DER, 740′ left of centerline, 93′ AGL/947′ MSL.
Rwy 24: Mulitple Trees beginning 755′ from DER, 658′ right of centerline, up to 100′ AGL/948′ MSL.
Multiple Trees beginning 1833′ from DER, 681′ left of centerline, up to 100′ AGL/974′ MSL.

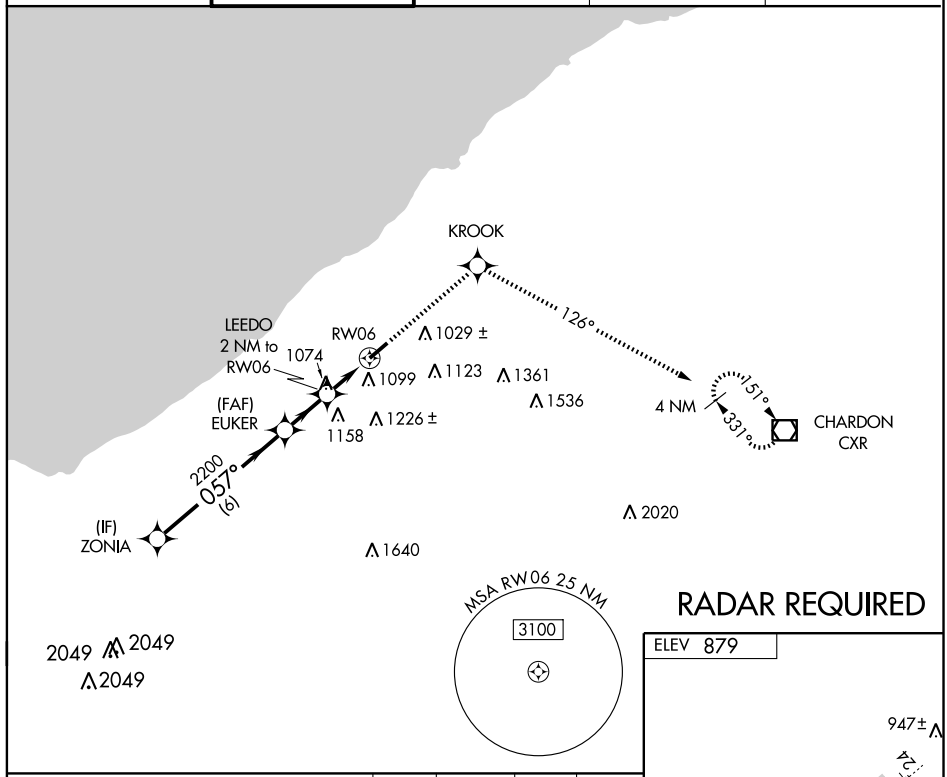
APP CRS	Rwy ldg	5102
057°	TDZE	873
	Apt Elev	879

RNAV (GPS) RWY 6
CLEVELAND/CUYAHOGA COUNTY (CGF)

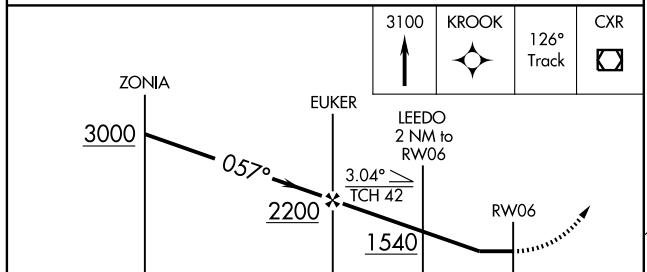
DME/DME RNP-0.3 NA. Visibility reduction by helicoptors NA. When local altimeter setting not received, use Cleveland-Hopkins Intl altimeter setting and increase all MDA 60 feet. Increase LNAV Cat D and Circling Cat C visibility ¼ mile.

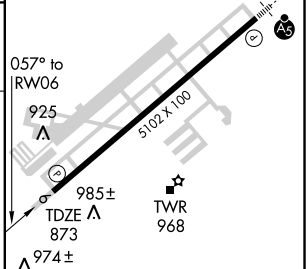
MISSED APPROACH: Climb to 3100 direct KROOK and via 126° Track to CXR VOR/DME and hold.

CLEVELAND APP CON	COUNTY TOWER★	GND CON	CLNC DEL	UNICOM
125.35 354.025	118.5 (CTAF) L	121.85	121.85	122.95



RADAR REQUIRED





CATEGORY	A	B	C	D
LNAV MDA	1380-1	507 (600-1)	1380-1½	507 (600-1½)
CIRCLING	1400-1 521 (600-1)	1420-1 541 (600-1)	1420-1½ 541 (600-1½)	1480-2 601 (700-2)

REIL Rwy 6 L
HIRL Rwy 6-24 L

EC-2, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	5102
238°	TDZE	879
	Apt Elev	879

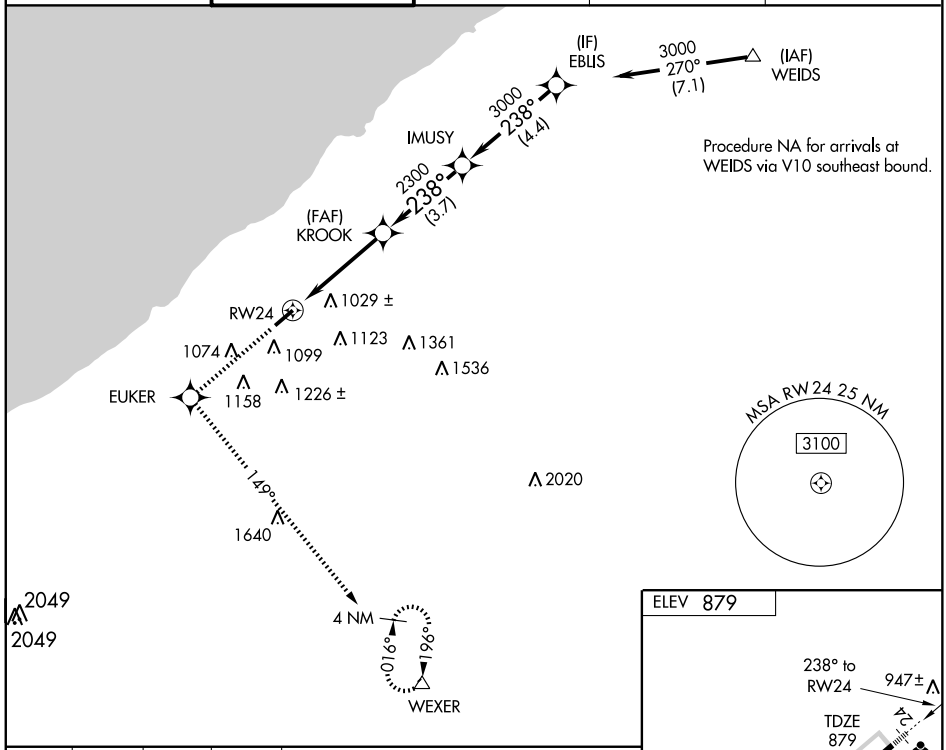
RNAV (GPS) RWY 24
CLEVELAND/CUYAHOGA COUNTY (CGF)

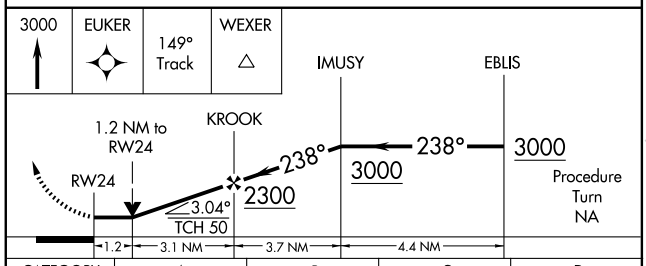
For inoperative MALSR, increase LNAV Cats A/B visibility to 1 mile and Cat D to 1¼ mile. DME/DME RNP-0.3 NA. Visibility reduction by helicoptors NA. For inoperative MALSR when using Cleveland-Hopkins Intl altimeter setting, increase LNAV Cats A/B visibility to 1mile. When local altimeter setting not received, use Cleveland-Hopkins Intl altimeter setting and increase all MDA 60 feet and circling Cat C visibility ¼ mile. VDP NA when using Cleveland-Hopkins Intl altimeter setting.

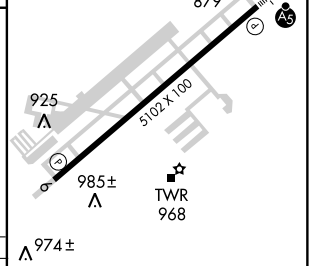
MALSR

MISSED APPROACH: Climb to 3000 direct EUKER and via 149° Track to WEXER and hold.

CLEVELAND APP CON	COUNTY TOWER★	GND CON	CLNC DEL	UNICOM
125.35 354.025	118.5 (CTAF) L	121.85	121.85	122.95







CATEGORY	A	B	C	D
LNAV MDA	1300-¾ 421 (500-¾)			1300-1 421 (500-1)
CIRCLING	1400-1 521 (600-1)	1420-1 541 (600-1)	1420-1½ 541 (600-1½)	1480-2 601 (700-2)

REIL Rwy 6 L
HIRL Rwy 6-24 L

EC-2, 14 JAN 2010 to 11 FEB 2010

SANDUSKY TWO DEPARTURE

(SKY2.SKY) 09183

SL-5027 (FAA)

CLEVELAND/CUYAHOGA COUNTY (CGF)
CLEVELAND, OHIO

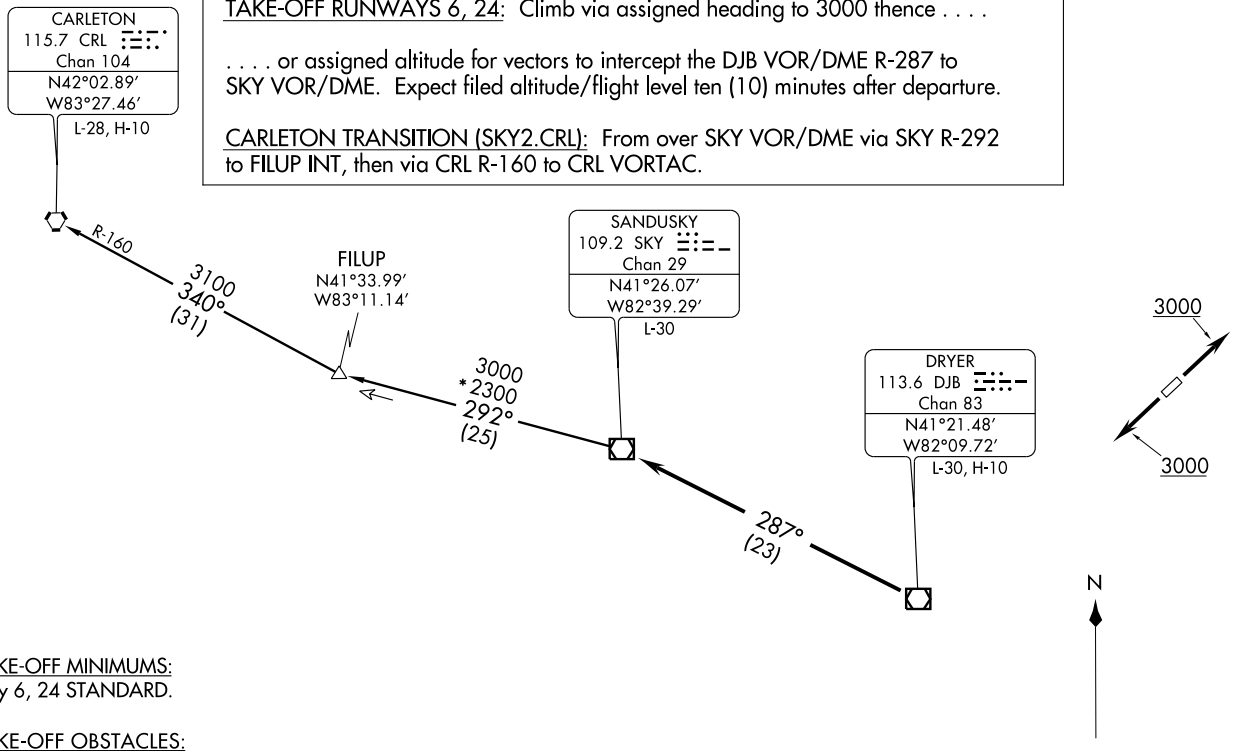
DEPARTURE ROUTE DESCRIPTION

CLEVELAND DEP CON
125.35 346.325

TAKE-OFF RUNWAYS 6, 24: Climb via assigned heading to 3000 thence . . . .

. . . . or assigned altitude for vectors to intercept the DJB VOR/DME R-287 to SKY VOR/DME. Expect filed altitude/flight level ten (10) minutes after departure.

CARLETON TRANSITION (SKY2.CRL): From over SKY VOR/DME via SKY R-292 to FILUP INT, then via CRL R-160 to CRL VORTAC.



TAKE-OFF MINIMUMS:
Rwy 6, 24 STANDARD.

TAKE-OFF OBSTACLES:
Rwy 6: Trees beginning 2127′ from DER, 975′ right of centerline, up to 109′ AGL/982′ MSL.
Tree 2595′ from DER, 740′ left of centerline, 93′ AGL/947′ MSL.
Rwy 24: Multiple Trees beginning 755′ from DER, 658′ right of centerline, up to 100′ AGL/948′ MSL.
Multiple Trees beginning 1833′ from DER, 681′ left of centerline, up to 100′ AGL/974′ MSL.

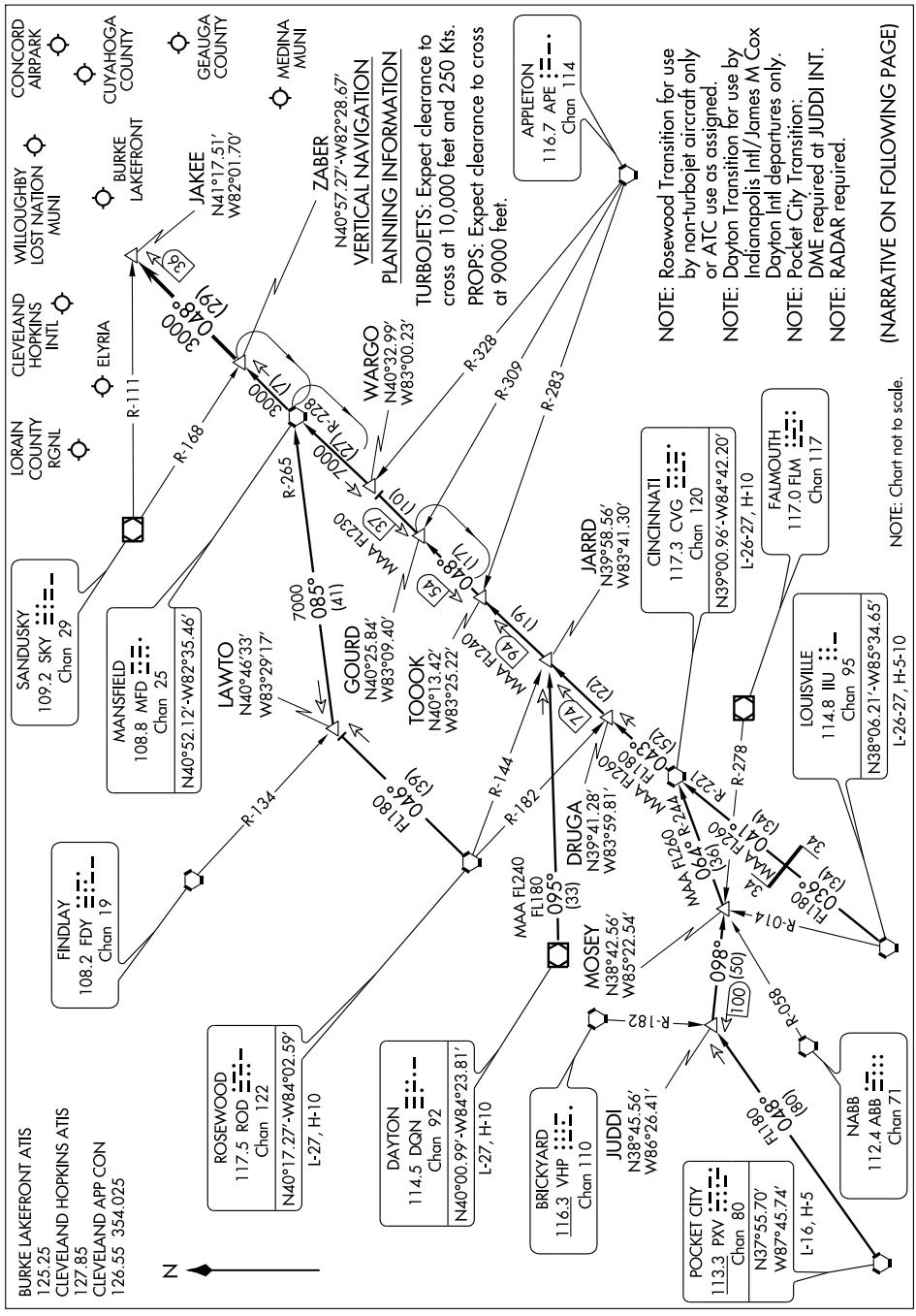
NOTE: RADAR required
NOTE: Turboprop aircraft only

NOTE: Chart not to scale.

ZABER ONE ARRIVAL

ST-84 (FAA)

CLEVELAND, OHIO



ARRIVAL ROUTE DESCRIPTION

CINCINNATI TRANSITION (CVG.ZABER1): From over CVG VORTAC via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

DAYTON TRANSITION (DQN.ZABER1): (For use by INDIANAPOLIS INTL/JAMES M COX DAYTON INTL departures only). From over DQN VOR/DME via DQN R-095 to JARRD INT, then via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

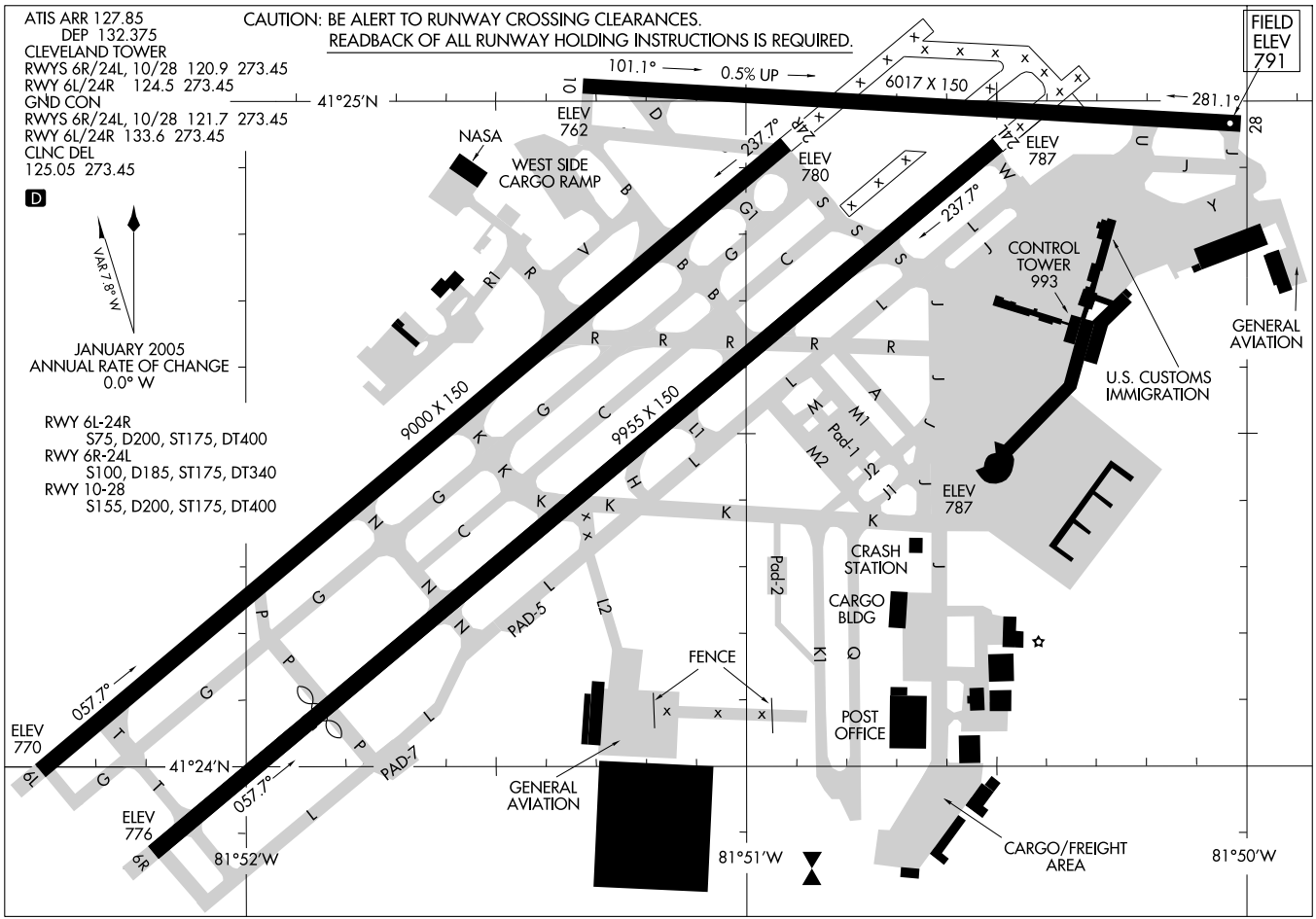
LOUISVILLE TRANSITION (IIU.ZABER1): From over IIU VORTAC via IIU R-036 and CVG R-221 to CVG VORTAC, then via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

POCKET CITY TRANSITION (PXV.ZABER1): (DME REQUIRED at JUDDI INT) From over PXV VORTAC via PXV R-048 to JUDDI INT, then via FLM R-278 to MOSEY INT, then via CVG R-244 to CVG VORTAC, then via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

ROSEWOOD TRANSITION (ROD.ZABER1): (For use by non-turbo aircraft only or ATC use as assigned). From over ROD VORTAC via ROD R-046 to LAWTO INT, then via MFD R-265 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

. . . . From over ZABER INT via MFD R-048 to JAKEE INT. Expect radar vectors to final approach course.

EC-2, 14 JAN 2010 to 11 FEB 2010


AIRPORT DIAGRAM
CLEVELAND-HOPKINS INTL (CLE)
CLEVELAND, OHIO
AL-84 (FAA)
ATIS ARR 127.85
DEP 132.375
CLEVELAND TOWER
RWYS 6R/24L, 10/28 120.9 273.45
RWY 6L/24R 124.5 273.45
GND CON
RWYS 6R/24L, 10/28 121.7 273.45
RWY 6L/24R 133.6 273.45
CLNC DEL
125.05 273.45
D
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.
FIELD ELEV 791
101.1°
0.5% UP
6017 X 150
281.1°
41°25'N
ELEV 762
NASA
WEST SIDE CARGO RAMP
237.7°
ELEV 780
ELEV 787
VAR 7.8° W
JANUARY 2005
ANNUAL RATE OF CHANGE
0.0° W
RWY 6L-24R
S75, D200, ST175, DT400
RWY 6R-24L
S100, D185, ST175, DT340
RWY 10-28
S155, D200, ST175, DT400
9000 X 150
9955 X 150
CONTROL TOWER 993
GENERAL AVIATION
U.S. CUSTOMS IMMIGRATION
ELEV 787
CRASH STATION
CARGO BLDG
Pad-1
Pad-2
PAD-5
PAD-7
FENCE
POST OFFICE
057.7°
ELEV 770
ELEV 776
41°24'N
GENERAL AVIATION
CARGO/FREIGHT AREA
81°52'W
81°51'W
81°50'W

ATIS DEP
132.375
CLEVELAND DEP CON
128.25 346.32

TAKE-OFF MINIMUMS:
Rwys 6L, 6R, 10, 24R, 24L, 28: STANDARD.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 6L, 6R, 10, 24R, 24L, 28: Climb via assigned heading to 5000 thence . . . .

. . . . or assigned altitude for radar vectors to HUDDZ, then via 267° track to AMRST, then via 324° track to ALPHE. Expect filed altitude/flight level ten (10) minutes after departure.

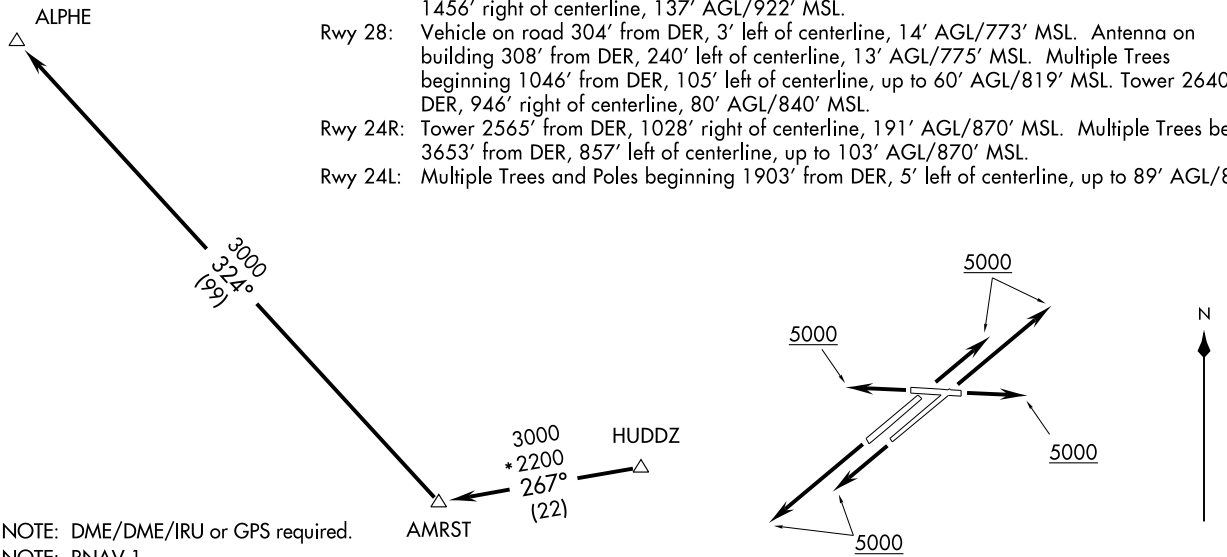
TAKE-OFF OBSTACLES:

Rwy 10: Multiple Signs beginning 1237′ from DER, 717′ left of centerline, up to 68′ AGL/857′ MSL. Light Pole 1746′ from DER, 786′ right of centerline, 53′ AGL/842′ MSL. Tower 4157′ from DER, 1456′ right of centerline, 137′ AGL/922′ MSL.

Rwy 28: Vehicle on road 304′ from DER, 3′ left of centerline, 14′ AGL/773′ MSL. Antenna on building 308′ from DER, 240′ left of centerline, 13′ AGL/775′ MSL. Multiple Trees beginning 1046′ from DER, 105′ left of centerline, up to 60′ AGL/819′ MSL. Tower 2640′ from DER, 946′ right of centerline, 80′ AGL/840′ MSL.

Rwy 24R: Tower 2565′ from DER, 1028′ right of centerline, 191′ AGL/870′ MSL. Multiple Trees beginning 3653′ from DER, 857′ left of centerline, up to 103′ AGL/870′ MSL.

Rwy 24L: Multiple Trees and Poles beginning 1903′ from DER, 5′ left of centerline, up to 89′ AGL/849′ MSL.



NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: RADAR REQUIRED.

NOTE: Chart not to scale.

[ALPHE2.ALPHE] 09127

ALPHE TWO DEPARTURE (RNAV)

SL-84 (FAA)

CLEVELAND-HOPKINS INTL (CLE)
CLEVELAND, OHIO

ATIS DEP
132.375
CLEVELAND DEP CON
128.25 346.325

TAKE-OFF MINIMUMS:
Rwys 6L, 6R, 10, 24R, 24L, 28: STANDARD.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 6L, 6R, 10, 24R, 24L, 28: Climb via assigned heading to 5000 thence. . . .

. . . . or assigned altitude for vectors to intercept the DJB VOR/DME R-265 to AMRST INT then via (Transition). Expect filed altitude/flight level ten (10) minutes after departure.

CARLETON TRANSITION (AMRST2.CRL): From over AMRST INT via CRL R-159 to CRL VORTAC.
WATERVILLE TRANSITION (AMRST2.VWV): From over AMRST INT via VWV R-115 to VWV VOR/DME.

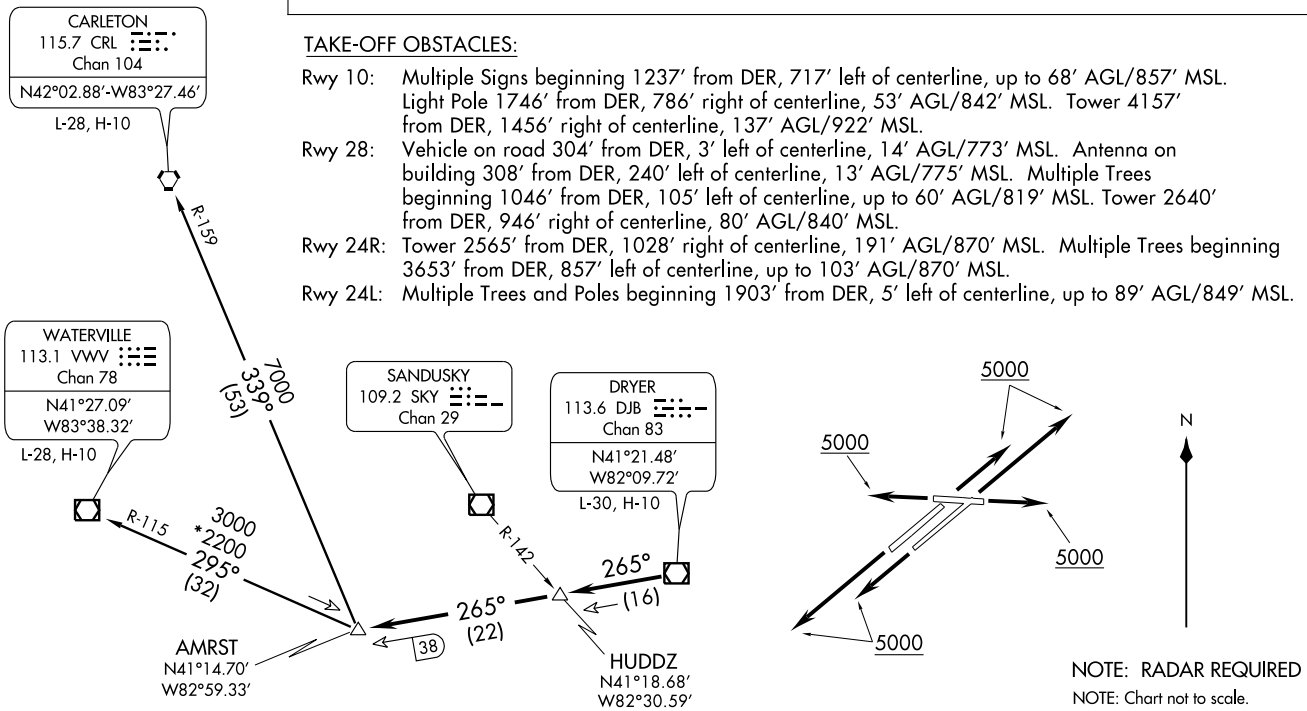
TAKE-OFF OBSTACLES:

Rwy 10: Multiple Signs beginning 1237′ from DER, 717′ left of centerline, up to 68′ AGL/857′ MSL. Light Pole 1746′ from DER, 786′ right of centerline, 53′ AGL/842′ MSL. Tower 4157′ from DER, 1456′ right of centerline, 137′ AGL/922′ MSL.

Rwy 28: Vehicle on road 304′ from DER, 3′ left of centerline, 14′ AGL/773′ MSL. Antenna on building 308′ from DER, 240′ left of centerline, 13′ AGL/775′ MSL. Multiple Trees beginning 1046′ from DER, 105′ left of centerline, up to 60′ AGL/819′ MSL. Tower 2640′ from DER, 946′ right of centerline, 80′ AGL/840′ MSL.

Rwy 24R: Tower 2565′ from DER, 1028′ right of centerline, 191′ AGL/870′ MSL. Multiple Trees beginning 3653′ from DER, 857′ left of centerline, up to 103′ AGL/870′ MSL.

Rwy 24L: Multiple Trees and Poles beginning 1903′ from DER, 5′ left of centerline, up to 89′ AGL/849′ MSL.



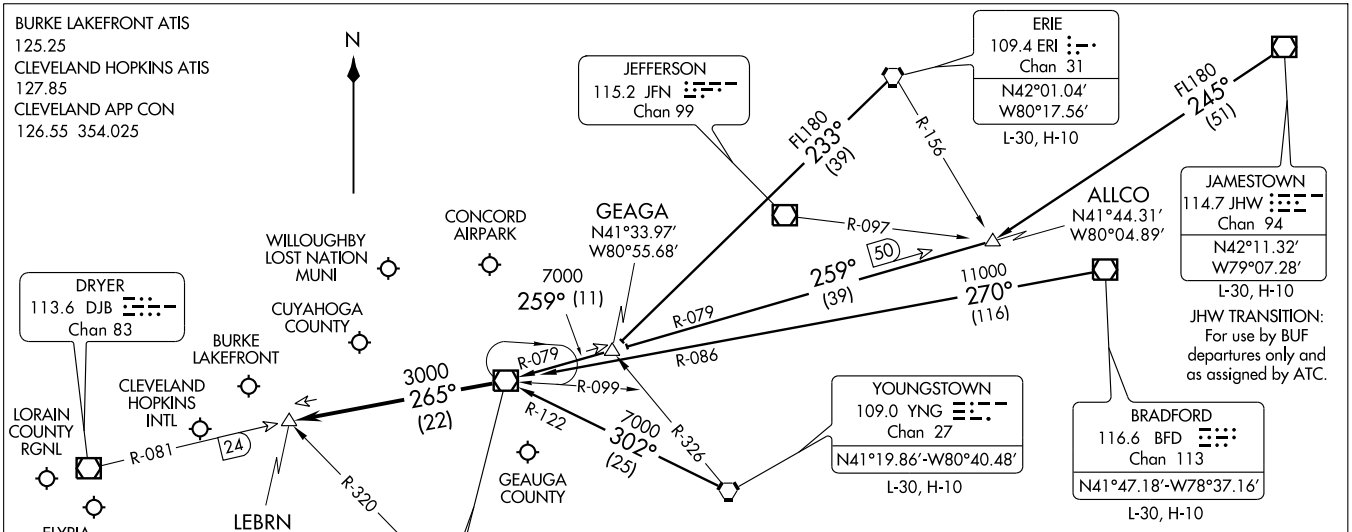
AMRST TWO DEPARTURE

(AMRST2.AMRST) 09183

SL-84 (FAA)

CLEVELAND-HOPKINS INTL (CLE)
CLEVELAND, OHIO

CHARDON TWO ARRIVAL



VERTICAL NAVIGATION PLANNING INFORMATION

TURBOJETS: Expect clearance to cross at 10,000′ and 250 Kts.
PROPS: Expect clearance to cross at 9000′.

NOTE: RADAR Required.

NOTE: Chart not to scale.

ARRIVAL ROUTE DESCRIPTION

BRADFORD TRANSITION (BFD.CXR2): From over BFD VOR/DME via BFD R-270 and CXR R-086 to CXR VOR/DME. Thence . . . .

ERIE TRANSITION (ERI.CXR2): From over ERI VORTAC via ERI R-233 to GEAGA INT, then via CXR R-079 to CXR VOR/DME. Thence . . . .

JAMESTOWN TRANSITION (JHW.CXR2): (For use by BUF departures only and as assigned by ATC) From over JHW VOR/DME via JHW R-245 to ALLCO INT, then via CXR R-079 to CXR VOR/DME. Thence . . . .

YOUNGSTOWN TRANSITION (YNG.CXR2): From over YNG VORTAC via YNG R-302 and CXR R-122 to CXR VOR/DME. Thence . . . .

. . . . From CXR VOR/DME via R-265 to LEBRN INT, expect vectors to final approach course.

LOC/DME I-PVY	APP CRS	Rwy ldg	9000
111.55	237°	TDZE	780
Chan 52(Y)		Apt Elev	791

CONVERGING ILS RWY 24R

CLEVELAND-HOPKINS INTL (CLE)

NA

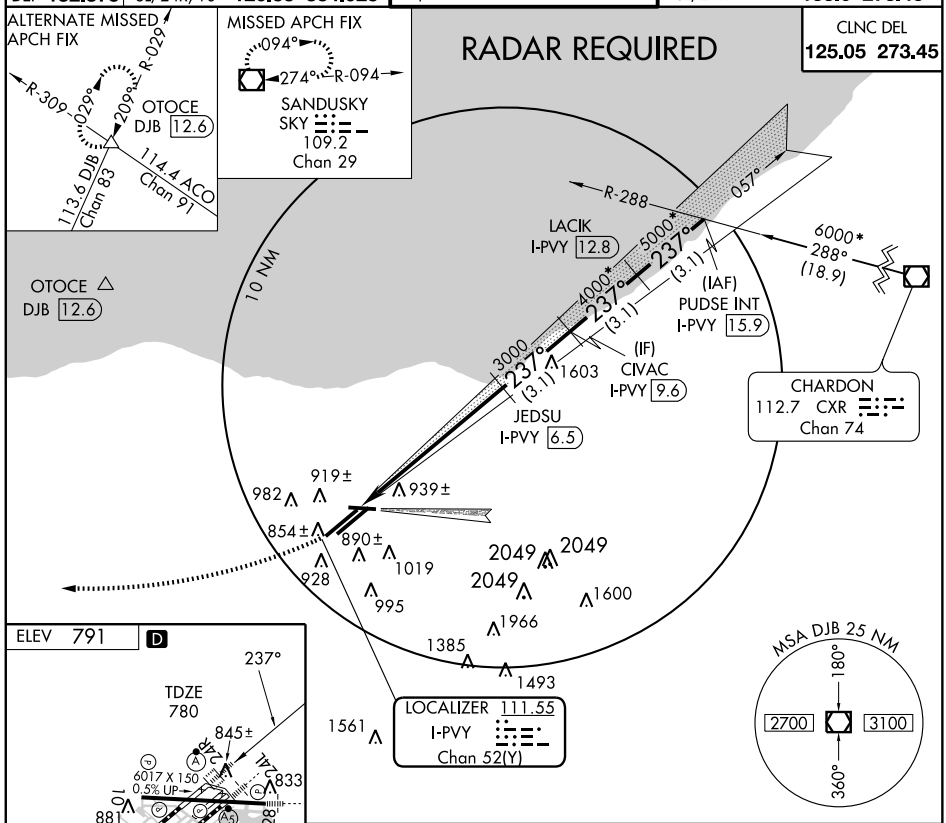
Inoperative table does not apply.
Simultaneous converging approach authorized with converging ILS Rwy 28.

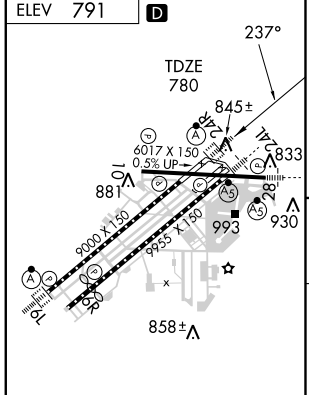
ALSF-2

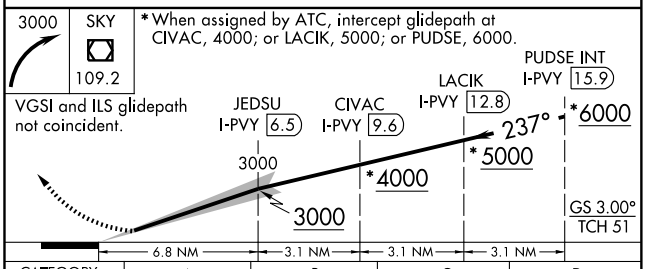
MISSED APPROACH: Climbing right turn to 3000 direct SKY VOR/DME and hold.

ATIS	CLEVELAND APP CON		CLEVELAND TOWER		GND CON	
ARR 127.85	6R/24L, 28	124.0 354.025	6R/24L, 10/28	120.9 273.45	6R/24L, 10/28	121.7 273.45
DEP 132.375	6L/24R, 10	126.55 354.025	6L/24R	124.5 273.45	6L/24R	133.6 273.45

CLNC DEL 125.05 273.45







CATEGORY	A	B	C	D
S-ILS 24R	2240-2 1460 (1500-2)		2240-3 1460 (1500-3)	

TDZ/CL Rwy 6R, 6L, and 24R
REIL Rwy 28
HIRL Rwys 10-28, 6R-24L, and 6L-24R

CONVERGING ILS RWY 28

CLEVELAND-HOPKINS INTL (CLE)

LOC/DME I-PXP	APP CRS	Rwy ldg	6017
110.7	280°	TDZE	791
Chan 44		Apt Elev	791

Inoperative table does not apply.
Simultaneous converging approach authorized with converging ILS Rwy 24R.

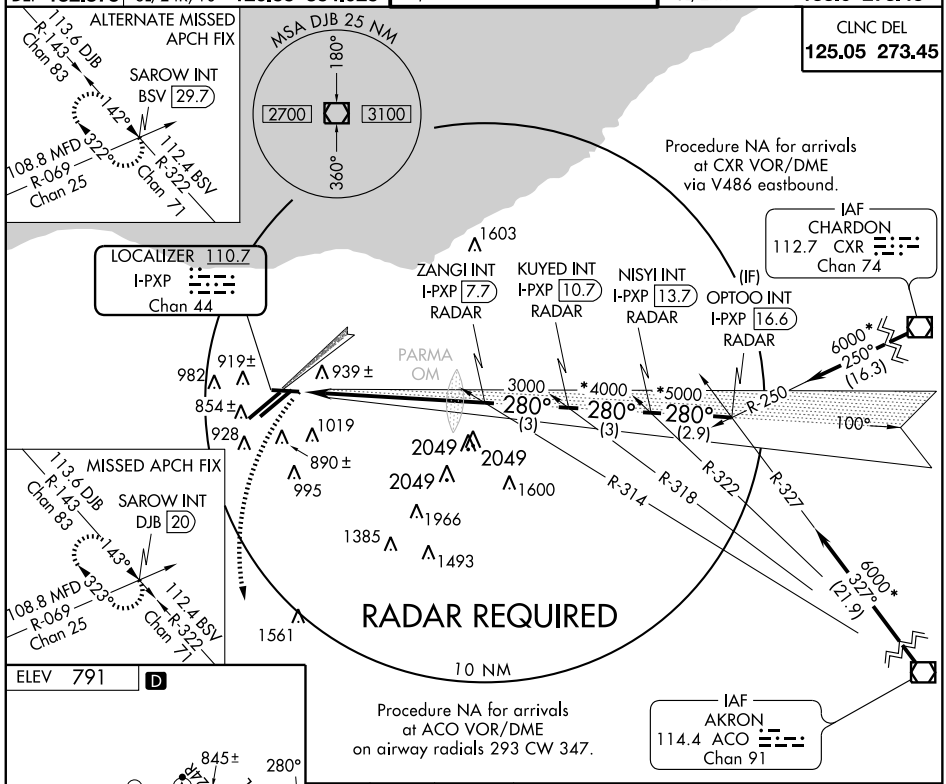
NA

MALSR

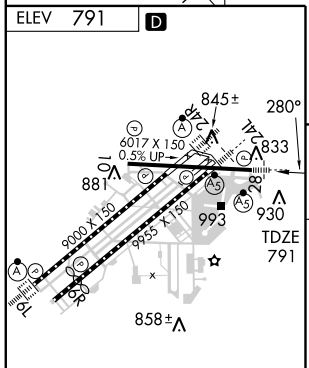
MISSED APPROACH: Climbing left turn to 3000 via heading 180° and DJB VOR/DME R-143 to SAROW INT/DJB 20 DME and hold.

ATIS	CLEVELAND APP CON		CLEVELAND TOWER		GND CON	
ARR 127.85	6R/24L, 28	124.0 354.025	6R/24L, 10/28	120.9 273.45	6R/24L, 10/28	121.7 273.45
DEP 132.375	6L/24R, 10	126.55 354.025	6L/24R	124.5 273.45	6L/24R	133.6 273.45

CLNC DEL 125.05 273.45

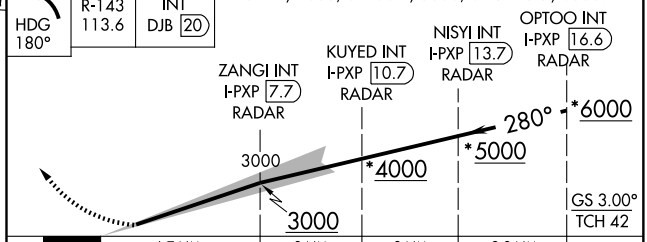


ELEV 791 D



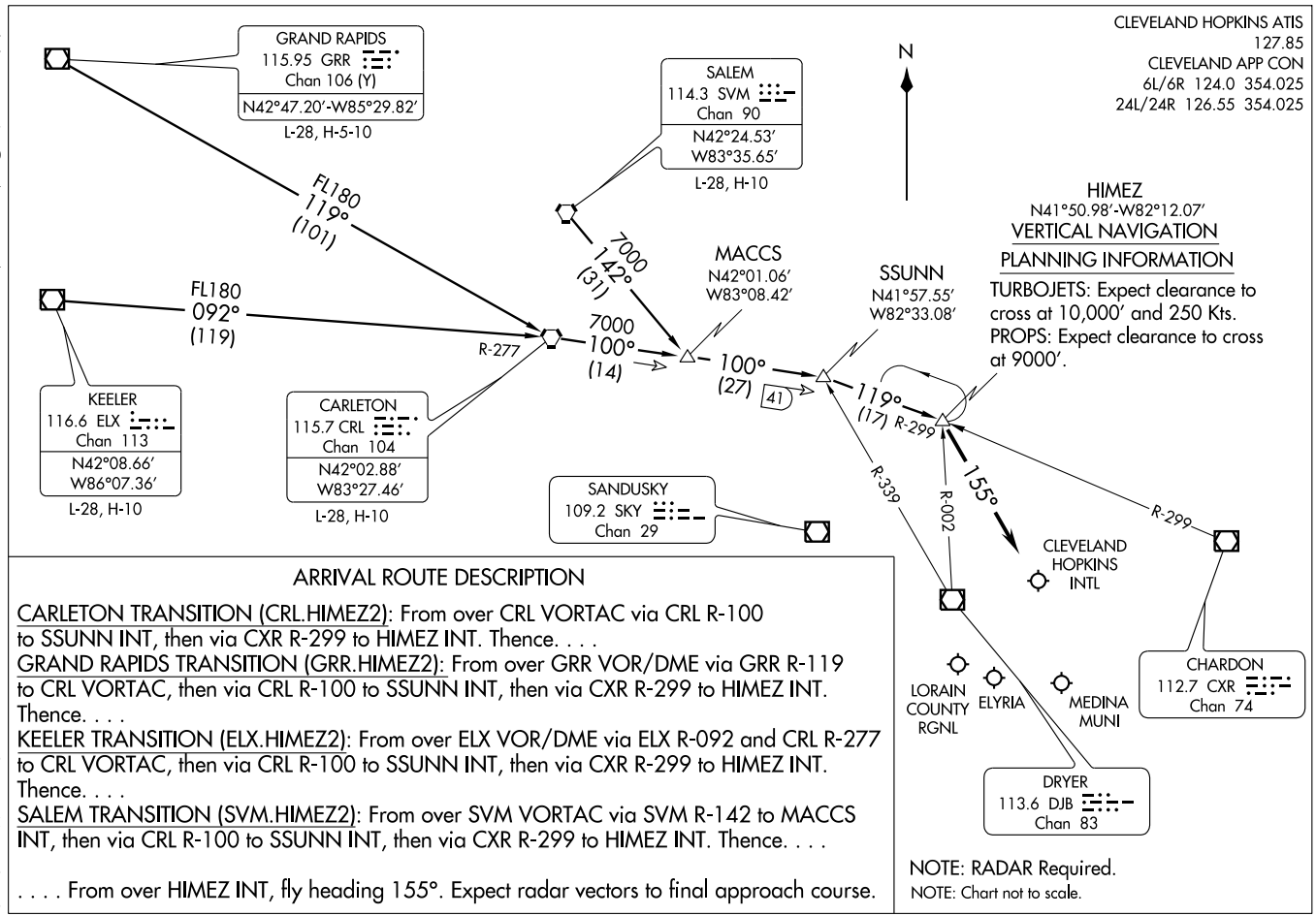
3000	DJB R-143 113.6	SAROW INT DJB 20
HDG 180°		

* When assigned by ATC, intercept glidepath at KUYED, 4000; or NISYI, 5000; or OPTOO, 6000.



CATEGORY	A	B	C	D
S-ILS 28	1791-2 1000 (1000-2)		1791-3 1000 (1000-3)	

TDZ/CL Rwy 6R, 6L, and 24R
REIL Rwy 28
HIRL Rwys 10-28, 6R-24L, and 6L-24R



ARRIVAL ROUTE DESCRIPTION

CARLETON TRANSITION (CRL.HIMEZ2): From over CRL VORTAC via CRL R-100 to SSUNN INT, then via CXR R-299 to HIMEZ INT. Thence. . . .

GRAND RAPIDS TRANSITION (GRR.HIMEZ2): From over GRR VOR/DME via GRR R-119 to CRL VORTAC, then via CRL R-100 to SSUNN INT, then via CXR R-299 to HIMEZ INT. Thence. . . .

KEELER TRANSITION (ELX.HIMEZ2): From over ELX VOR/DME via ELX R-092 and CRL R-277 to CRL VORTAC, then via CRL R-100 to SSUNN INT, then via CXR R-299 to HIMEZ INT. Thence. . . .

SALEM TRANSITION (SVM.HIMEZ2): From over SVM VORTAC via SVM R-142 to MACCS INT, then via CRL R-100 to SSUNN INT, then via CXR R-299 to HIMEZ INT. Thence. . . .

. . . . From over HIMEZ INT, fly heading 155°. Expect radar vectors to final approach course.

ILS or LOC/DME RWY 24R
CLEVELAND-HOPKINS INTL (CLE)

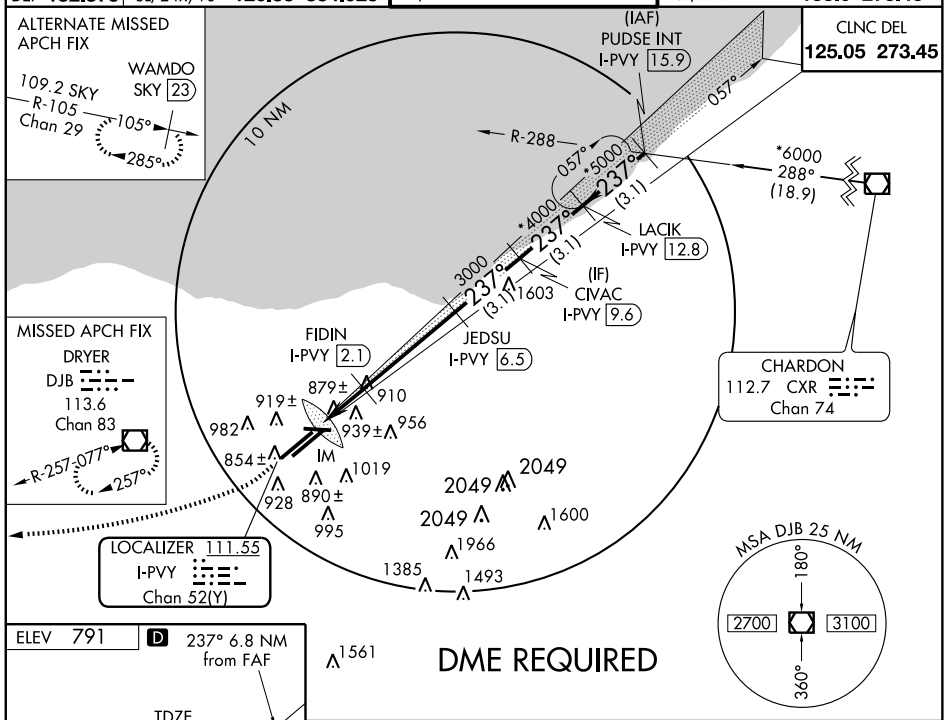
LOC/DME I-PVY	APP CRS		24R	24L
111.55	237°	Rwy ldg	9000	9955
Chan 52 (Y)		TDZE	780	787
		Apt Elev	791	791

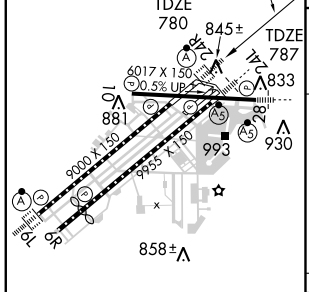
Inoperative table does not apply to sidestep 24L.

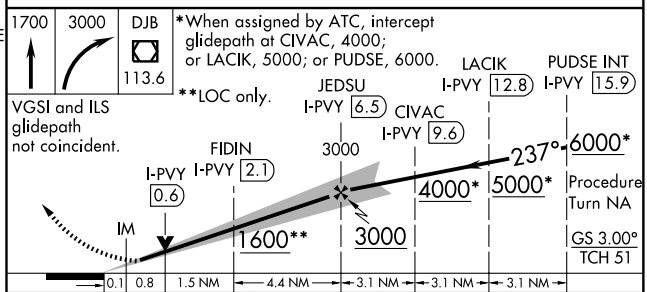
24L MALSR (A5) 24R ALSF-2 (A)

MISSED APPROACH: Climb to 1700, then climbing right turn to 3000 direct DJB VOR/DME and hold.

ATIS	CLEVELAND APP CON		CLEVELAND TOWER		GND CON	
ARR 127.85	6R/24L, 28	124.0 354.025	6R/24L, 10/28	120.9 273.45	6R/24L, 10/28	121.7 273.45
DEP 132.375	6L/24R, 10	126.55 354.025	6L/24R	124.5 273.45	6L/24R	133.6 273.45







CATEGORY	A	B	C	D
S-ILS 24R	980/18 200 (200-½)			
S-LOC 24R	1140/24 360 (400-½)			1140/40 360 (400-¾)
SIDESTEP 24L	1260/60 473 (500-1¼)		1260-1¾ 473 (500-1¾)	1260-2¼ 473 (500-2¼)

TDZ/CL Rwy 6R, 6L, and 24R
REIL Rwy 28
HIRL Rwys 10-28, 6R-24L, and 6L-24R

EC-2, 14 JAN 2010 to 11 FEB 2010

ILS or LOC RWY 6L
CLEVELAND-HOPKINS INTL (CLE)

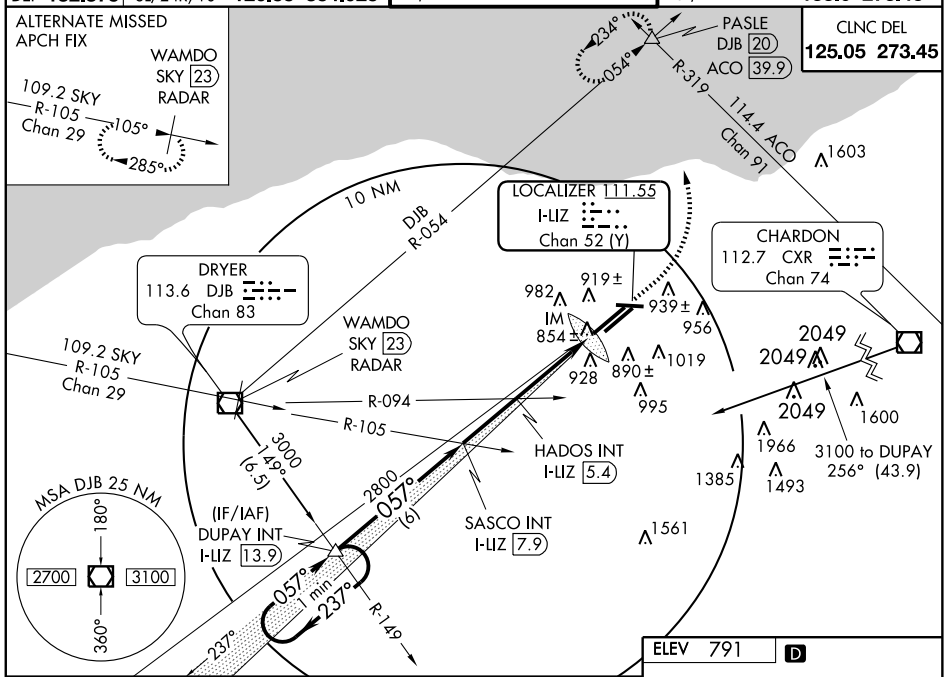
LOC/DME I-LIZ	APP CRS		6L	6R
111.55	057°	Rwy ldg	9000	8029
Chan 52 (Y)		TDZE	773	777
		Apt Elev	791	791

Inoperative table does not apply to Sidestep 6R. Sidestep maneuver not authorized prior to passing HADOS Int.

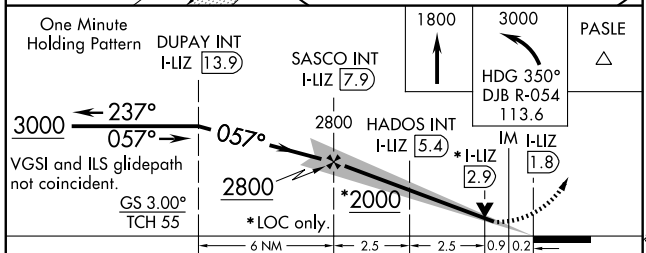
6L ALSF-2

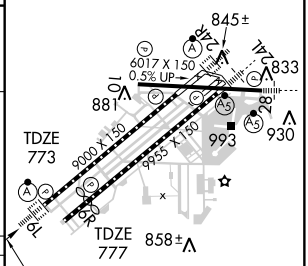
MISSED APPROACH: Climb to 1800, then climbing left turn to 3000 via heading 350° and DJB R-054 to PASLE Int/20 DME and hold.

ATIS	CLEVELAND APP CON		CLEVELAND TOWER		GND CON	
ARR 127.85	6R/24L, 28	124.0 354.025	6R/24L, 10/28	120.9 273.45	6R/24L, 10/28	121.7 273.45
DEP 132.375	6L/24R, 10	126.55 354.025	6L/24R	124.5 273.45	6L/24R	133.6 273.45



EC-2, 14 JAN 2010 to 11 FEB 2010





CATEGORY	A	B	C	D
S-ILS 6L	973/18 200 (200-½)			
S-LOC 6L	1140/24 367 (400-½)			1140/40 367 (400-¾)
SIDESTEP 6C	1180-1¼ 402 (400-1¼)		1180-1½ 402 (400-1½)	1180-2 402 (400-2)
SIDESTEP 6R	1180/60 403 (400-1¼)		1180-1½ 403 (400-1½)	1180-2 403 (400-2)
CIRCLING	1300-1 509 (600-1)		1300-1½ 509 (600-1½)	1380-2 589 (600-2)

TDZ/CL Rwy 6R, 6L, and 24R
REIL Rwy 28
HIRL Rwys 10-28, 6R-24L, and 6L-24R

FAF to MAP 6.1 NM					
Knots	60	90	120	150	180
Min:Sec	6:06	4:04	3:03	2:26	2:02

ILS or LOC RWY 6R
CLEVELAND-HOPKINS INTL (CLE)

LOC/DME I-CLE	APP CRS		6R	6L
111.9	057°	Rwy ldg	8029	9000
Chan 56		TDZE	777	773
		Apt Elev	791	791

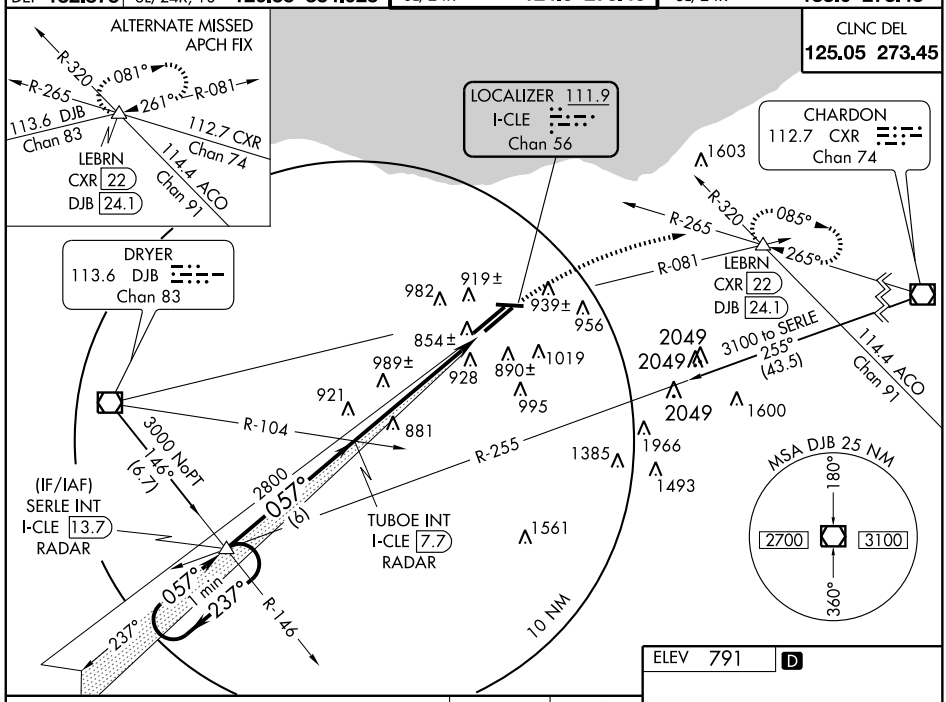
Inoperative table does not apply to Sidestep 6L Cats A and B.

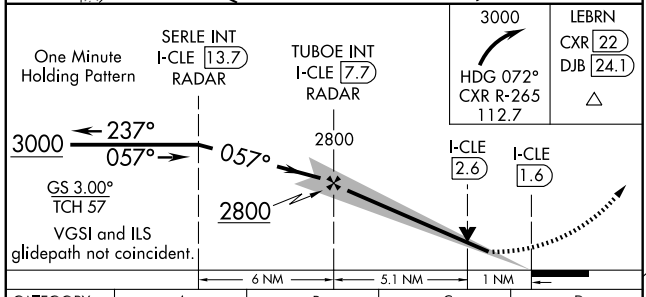
6L ALSF-2

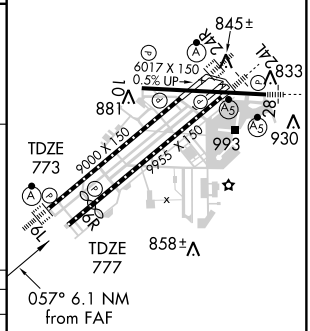
MISSED APPROACH: Climbing right turn to 3000 via heading 072° and CXR VOR/DME R-265 to LEBRN INT/CXR 22 DME and hold.

ATIS	CLEVELAND APP CON	CLEVELAND TOWER	GND CON
ARR 127.85	6R/24L, 28 124.0 354.025	6R/24L, 10/28 120.9 273.45	6R/24L, 10/28 121.7 273.45
DEP 132.375	6L/24R, 10 126.55 354.025	6L/24R 124.5 273.45	6L/24R 133.6 273.45

CLNC DEL 125.05 273.45







TDZ/CL Rwy 6R, 6L, and 24R
REIL Rwy 28
HIRL Rwys 10-28, 6R-24L, and 6L-24R

CATEGORY	A	B	C	D
S-ILS 6R	977/18 200 (200-½)			
S-LOC 6R	1140/24 363 (400-½)			1140/40 363 (400-¾)
SIDESTEP 6L	1140/60 367 (400-1¼)			1140-1¾ 367 (400-1¾)
CIRCLING	1300-1 509 (600-1)		1300-1½ 509 (600-1½)	1360-2 569 (600-2)

FAF to MAP 6.1 NM

Knots	60	90	120	150	180
Min:Sec	6:06	4:04	3:03	2:26	2:02

LOC/DME I-HPI 109.9 Chan 36	APP CRS 237°		24R	24L
		Rwy ldg	9000	9955
		TDZE	780	787
		Apt Elev	791	791

ILS or LOC RWY 24L

CLEVELAND-HOPKINS INTL (CLE)

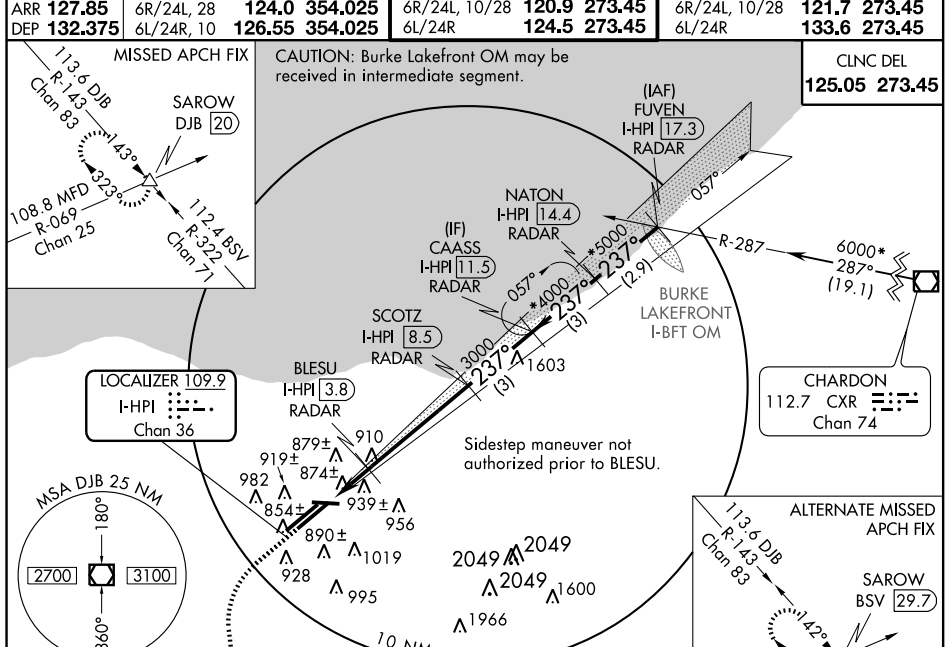
Inoperative table does not apply to Sidestep 24R. DME or RADAR required.

24L MALSR | 24R ALSF-2

MISSED APPROACH: Climb to 1300 then climbing left turn to 3000 via heading 200° and DJB R-143 to SAROW INT/DJB 20 DME and hold.

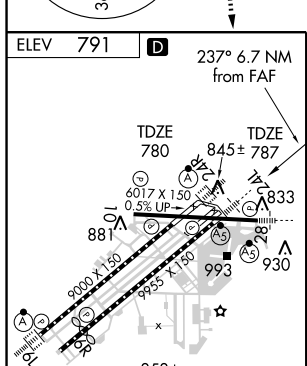
ATIS	CLEVELAND APP CON		CLEVELAND TOWER		GND CON	
ARR 127.85	6R/24L, 28	124.0 354.025	6R/24L, 10/28	120.9 273.45	6R/24L, 10/28	121.7 273.45
DEP 132.375	6L/24R, 10	126.55 354.025	6L/24R	124.5 273.45	6L/24R	133.6 273.45

CLNC DEL 125.05 273.45



EC-2, 14 JAN 2010 to 11 FEB 2010

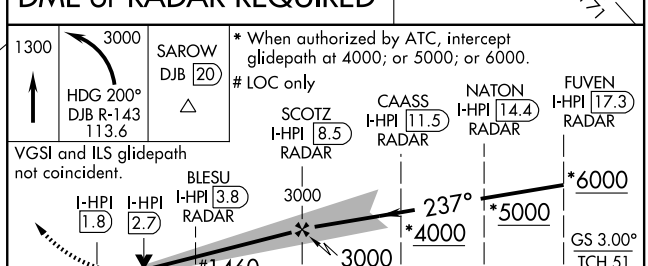
ELEV 791 D



TDZ/CL Rwy 6R, 6L, and 24R
REIL Rwy 28
HIRL Rwys 10-28, 6R-24L, and 6L-24R

FAF to MAP 6.7 NM					
Knots	60	90	120	150	180
Min:Sec	6:42	4:28	3:21	2:41	2:14

DME or RADAR REQUIRED



CATEGORY	A	B	C	D
S-ILS 24L	987/18 200 (200-½)			
S-LOC 24L	1140/24 353 (400-½)			1140/40 353 (400-¾)
SIDESTEP 24R	1140/60 360 (400-1¼)		1140-1½ 360 (400-1½)	1140-2 360 (400-2)

ILS or LOC RWY 28
CLEVELAND-HOPKINS INTL (CLE)

LOC/DME I-PXP	APP CRS	Rwy ldg	6017
110.7	280°	TDZE	791
Chan 44		Apt Elev	791

MALSR

MISSED APPROACH: Climb to 1400 then climbing left turn to 3000 direct DJB VOR/DME and hold.

ATIS	CLEVELAND APP CON		CLEVELAND TOWER		GND CON	
ARR 127.85	6R/24L, 28	124.0 354.025	6R/24L, 10/28	120.9 273.45	6R/24L, 10/28	121.7 273.45
DEP 132.375	6L/24R, 10	126.55 354.025	6L/24R	124.5 273.45	6L/24R	133.6 273.45

CLNC DEL 125.05 273.45

ALTERNATE MISSED APCH FIX
094°
274° R-094
SANDUSKY
109.2 SKY
Chan 29

Procedure NA for arrivals at CXR VOR/DME via V486 eastbound.

IAF
CHARDON
112.7 CXR
Chan 74

10 NM

1603

(IF)
OPTOO INT
I-PXP 16.6
RADAR

ZANGI INT
I-PXP 7.7
RADAR

NISYI INT
I-PXP 13.7
RADAR

LOCALIZER 110.7
I-PXP
Chan 44

982 919± 939± 956 964 1183 3000 *4000 *5000 *6000 250° (16.3) R-327 280° (3) 280° (3) 280° (2.9) 100°

854± 928 890± 1019 995 PARMA OM 2049 2049 2049 1600 1966 1385 1493 1561

R-250 R-318 R-322 R-314

KUYED INT
I-PXP 10.7
RADAR

*6000 327° (21.9)

MISSED APCH FIX
DRYER
DJB
113.6
Chan 83
R-257 077° 257°

MSA DJB 25 NM
180°
2700 3100
360°

IAF
AKRON
114.4 ACO
Chan 91

Procedure NA for arrivals at ACO VOR/DME on airway radials 293 CW 347.

ELEV 791 D

280° 6.7 NM from FAF

845± 833 881 930 993 858± 6017 X 150 0.5% UP 9000 X 150 9955 X 150 TDZE 791

TDZ/CL Rwy 6R, 6L, and 24R
REIL Rwy 28
HIRL Rwys 10-28, 6R-24L, and 6L-24R

1400	3000	DJB 113.6

*When assigned by ATC, intercept glidepath at KUYED, 4000; or NISYI, 5000; or OPTOO, 6000.

ZANGI INT I-PXP 7.7 RADAR | KUYED INT I-PXP 10.7 RADAR | NISYI INT I-PXP 13.7 RADAR | OPTOO INT I-PXP 16.6 RADAR

I-PXP 1.0 | I-PXP 2.5 | 3000 | *4000 | 280° *5000 *6000

3000

Procedure Turn NA

GS 3.00°
TCH 42

1.5 | 5.2 NM | 3 NM | 3 NM | 2.9 NM

CATEGORY	A	B	C	D
S-ILS 28	991/24 200 (200-½)			
S-LOC 28	1300/24 509 (600-½)		1300/50 509 (600-1)	

FAF to MAP 6.7 NM

Knots	60	90	120	150	180
Min:Sec	6:42	4:28	3:21	2:41	2:14

CLEVELAND, OHIO

AL-84 (FAA)

ILS PRM RWY 6L
(SIMULTANEOUS CLOSE PARALLEL)

CLEVELAND-HOPKINS INTL (CLE)

LOC/DME I-LIZ	APP CRS	Rwy ldg	9000
111.55	057°	TDZE	773
Chan 52 (Y)		Apt Elev	791

Procedure NA when glideslope not available.
Simultaneous approach authorized with LDA Rwy 6R.
Dual VHF Comm required. See additional requirements on PRM information page. Runway 6L and 6R separated by 1241 feet centerline to centerline.

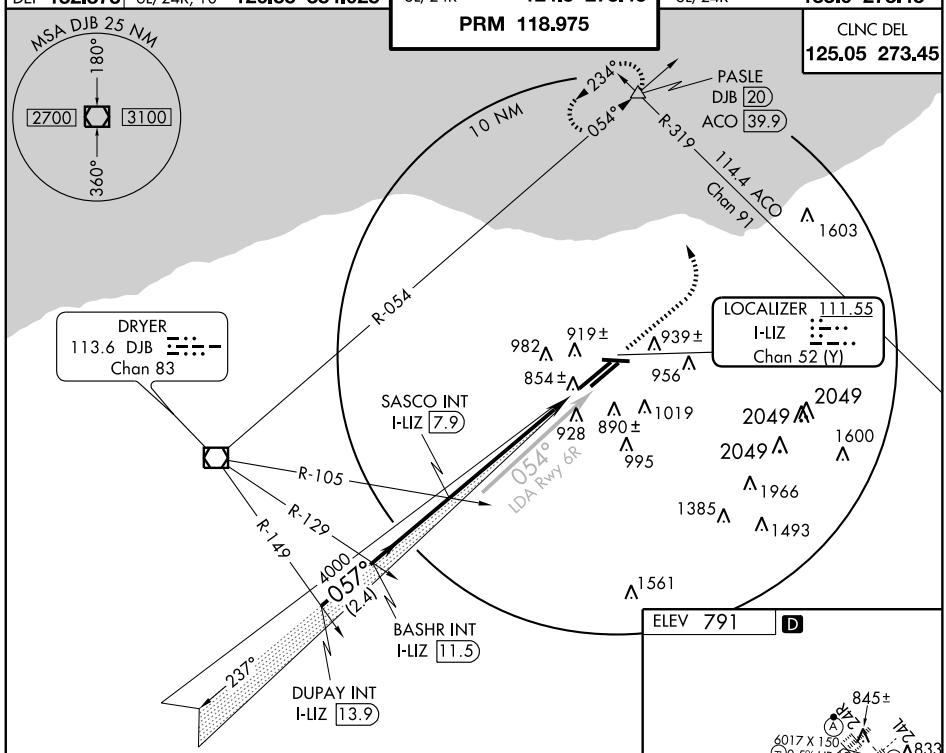
T
A NA

ALSF-2

MISSED APPROACH: Climb to 1800, then climbing left turn to 3000 via heading 350° and DJB R-054 to PASLE Int/20 DME and hold.

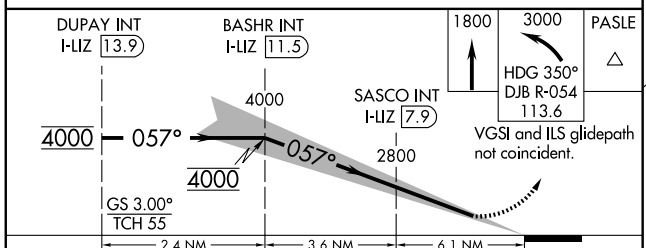
ATIS	CLEVELAND APP CON			CLEVELAND TOWER			GND CON		
ARR 127.85	6R/24L, 28	124.0	354.025	6R/24L, 10/28	120.9	273.45	6R/24L, 10/28	121.7	273.45
DEP 132.375	6L/24R, 10	126.55	354.025	6L/24R	124.5	273.45	6L/24R	133.6	273.45
				PRM 118.975					

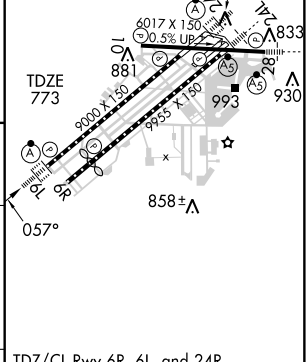
CLNC DEL
125.05 273.45



ELEV 791 D

RADAR REQUIRED





TDZ/CL Rwy 6R, 6L, and 24R
REIL Rwy 28
HIRL Rwys 10-28, 6R-24L, and 6L-24R

CATEGORY	A	B	C	D
S-ILS 6L	973/18 200 (200-½)			

ATTENTION ALL USERS OF ILS PRECISION RUNWAY MONITOR (PRM)

Special pilot training required. Pilots who are unable to participate, or dispatchers on their behalf, must contact the FAA Command Center prior to departure (1-800-333-4286 or 703-904-4452) to obtain an arrival reservation. Non-participating pilots enroute to CLE as an alternate, or trained pilots that are unexpectedly unable to participate due to in-flight circumstances will be afforded appropriate arrival services as operational conditions permit and shall notify the Cleveland ARTCC as soon as practical, but at least 100 miles from CLE.

Condensed Briefing Point:

When instructed, immediately switch to the tower frequency and select the monitor frequency audio.

1. **ATIS.** When the ATIS broadcast advises that simultaneous ILS/PRM and LDA/PRM approaches are in progress, pilots should brief to fly the ILS/PRM approach. If later advised to expect an ILS approach, the ILS PRM chart may be used after completing the following briefing items:

(a) Minimums and missed approach procedures are unchanged.
(b) Monitor frequency no longer required.
(c) A lower glideslope intercept altitude may be assigned when advised to expect ILS 6L approach.

Simultaneous parallel approaches will only be offered/conducted when the weather is at least 1,200 feet (ceiling), and 3 miles (visibility).

2. **Dual VHF Communication required.** To avoid blocked transmissions, each runway will have two frequencies, a primary and a monitor frequency. The tower controller will transmit on both frequencies. The Monitor controller's transmissions, if needed, will override both frequencies. Pilots will ONLY transmit on the tower controller's frequency, but will listen to both frequencies. Select the monitor frequency audio only when instructed by ATC to contact the tower. The volume levels should be set about the same on both radios so that the pilots will be able to hear transmissions on at least one frequency if the other is blocked.

3. **All "Breakouts" are to be hand flown** to assure that the maneuver is accomplished in the shortest amount of time. Pilots, when directed by ATC to break off an approach, must assume that an aircraft is blundering toward their course and a breakout must be initiated immediately.

(a) ATC Directed "Breakouts:" ATC directed breakouts will consist of a turn and a climb or descent. Pilots must always initiate the breakout in response to an air traffic controller instruction. Controllers will give a descending breakout only when there are no other reasonable options available, but in no case will the descent be below minimum vectoring altitude (MVA) which provides at least 1,000 feet required obstuction clearance. The applicable MVA is 2,700 feet at CLE.

(b) Phraseology - "TRAFFIC ALERT:" If an aircraft enters the "NO TRANSGRESSION ZONE (NTZ)," the controller will breakout the threatened aircraft on the adjacent approach. The phraseology for the breakout will be:

"TRAFFIC ALERT, (aircraft call sign) TURN (left/right) IMMEDIATELY, HEADING (degrees), CLIMB/DESCEND AND MAINTAIN (altitude)".

4. **LDA TRAFFIC:** While conducting this ILS/PRM approach to Runway 6L, other aircraft may be conducting the Offset LDA/PRM approach to Runway 6R. These aircraft will approach from the right-rear and will re-align with 6R after making visual contact with the ILS traffic.

EC-2, 14 JAN 2010 to 11 FEB 2010

ILS PRM RWY 24R (SIMULTANEOUS CLOSE PARALLEL)

CLEVELAND-HOPKINS INTL (CLE)

LOC/DME I-PVY	APP CRS	Rwy ldg	9000
111.55	237°	TDZE	780
Chan 52 (Y)		Apt Elev	791

NA

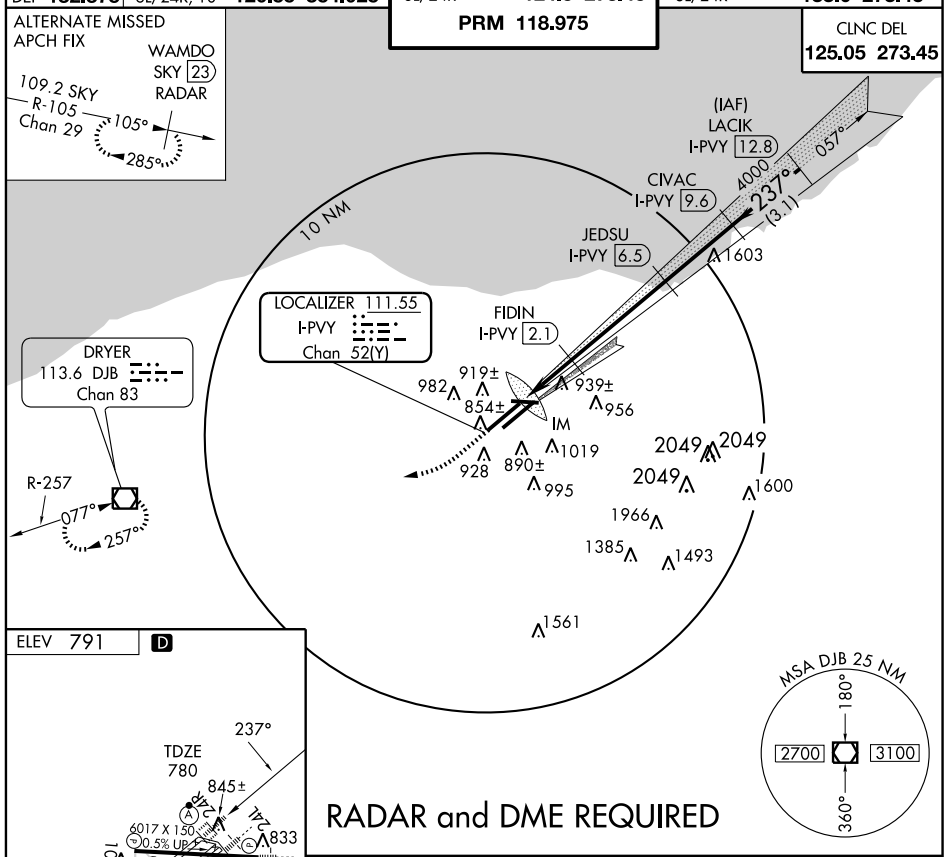
Procedure NA when glideslope not available. Simultaneous close parallel approach authorized with LDA PRM Rwy 24L. Dual VHF comm required. Runways 24R and 24L separated by 1241 feet centerline to centerline. See additional requirements on adjacent information page.

ALSF-2

MISSED APPROACH: Climb to 1700, then climbing right turn to 3000 direct DJB VOR/DME and hold.

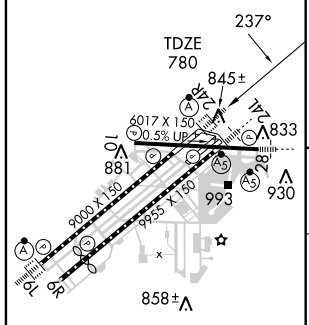
ATIS	CLEVELAND APP CON			CLEVELAND TOWER			GND CON		
ARR 127.85	6R/24L, 28	124.0	354.025	6R/24L, 10/28	120.9	273.45	6R/24L, 10/28	121.7	273.45
DEP 132.375	6L/24R, 10	126.55	354.025	6L/24R	124.5	273.45	6L/24R	133.6	273.45
				PRM 118.975					

CLNC DEL 125.05 273.45

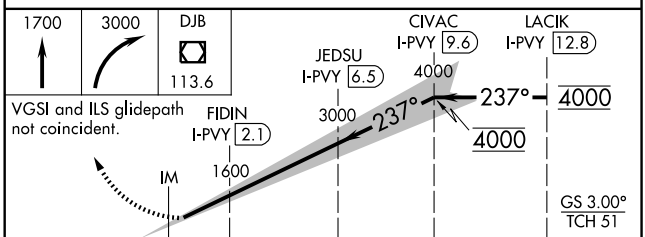


RADAR and DME REQUIRED

ELEV 791 D



TDZ/CL Rwy 6R, 6L, and 24R
REIL Rwy 28
HIRL Rwys 10-28, 6R-24L, and 6L-24R



CATEGORY	A	B	C	D
S-ILS 24R	980/18 200 (200-½)			

ATTENTION ALL USERS OF ILS PRECISION RUNWAY MONITOR (PRM)

Condensed Briefing Point:

- **When instructed, immediately switch to the tower frequency and select the monitor frequency audio.**

1. **ATIS.** When the ATIS broadcast advises that simultaneous ILS/PRM 24R and LDA/PRM 24L approaches are in progress, pilots should brief to fly the ILS/PRM 24R approach. If later advised to expect an ILS 24R approach, the ILS PRM 24R chart may be used after completing the following briefing items:

   a. Minimums and missed approach procedures are unchanged.
   b. Monitor frequency no longer required.
   c. A lower glideslope intercept altitude may be assigned when advised to expect ILS 24R approach.

   Simultaneous parallel approaches will only be offered/conducted when the weather is at least 1,200 feet (ceiling), and 3 miles (visibility).

2. **Dual VHF Communication required.** To avoid blocked transmissions, each runway will have two frequencies, a primary and a monitor frequency. The tower controller will transmit on both frequencies. The Monitor controller's transmissions, if needed, will override both frequencies. Pilots will ONLY transmit on the tower controller's frequency, but will listen to both frequencies. Select the monitor frequency audio only when instructed by ATC to contact the tower. The volume levels should be set about the same on both radios so that the pilots will be able to hear transmissions on at least one frequency if the other is blocked.

3. **All "Breakouts" are to be hand flown** to assure that the maneuver is accomplished in the shortest amount of time. Pilots, when directed by ATC to break off an approach, must assume that an aircraft is blundering toward their course and a breakout must be initiated immediately.

   (a) ATC Directed "Breakouts:" ATC directed breakouts will consist of a turn and a climb or descent. Pilots must always initiate the breakout in response to an air traffic controller instruction. Controllers will give a descending breakout only when there are no other reasonable options available, but in no case will the descent be below minimum vectoring altitude (MVA) which provides at least 1,000 feet required obstuction clearance. The applicable MVA is 2,600 feet at CLE.

   (b) Phraseology - "TRAFFIC ALERT:" If an aircraft enters the "NO TRANSGRESSION ZONE (NTZ)," the controller will breakout the threatened aircraft on the adjacent approach. The phraseology for the breakout will be:

   "TRAFFIC ALERT, (aircraft call sign) TURN (left/right) IMMEDIATELY, HEADING (degrees), CLIMB/DESCEND AND MAINTAIN (altitude)".

4. **LDA Traffic:** While conducting this ILS/PRM 24R approach, other aircraft may be conducting the Offset LDA/PRM 24L approach. These aircraft will approach from the left-rear and will re-align with 24L after making visual contact with the ILS traffic.

5. **Glide Slope Navigation:** Descent on the glide slope meets any published crossing restriction.

Special pilot training required. Pilots who are unable to participate, or dispatchers on their behalf, must contact the FAA Command Center prior to departure (1-800-333-4286 or 703-904-4452) to obtain an arrival reservation. Non-participating pilots enroute to CLE as an alternate, or trained pilots that are unexpectedly unable to participate due to in-flight circumstances will be afforded appropriate arrival services as operational conditions permit and shall notify the Cleveland ARTCC as soon as practical, but at least 100 miles from CLE.

EC-2, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-LIZ 111.55 Chan 52 (Y)	APP CRS 057°	Rwy ldg 9000 TDZE 773 Apt Elev 791

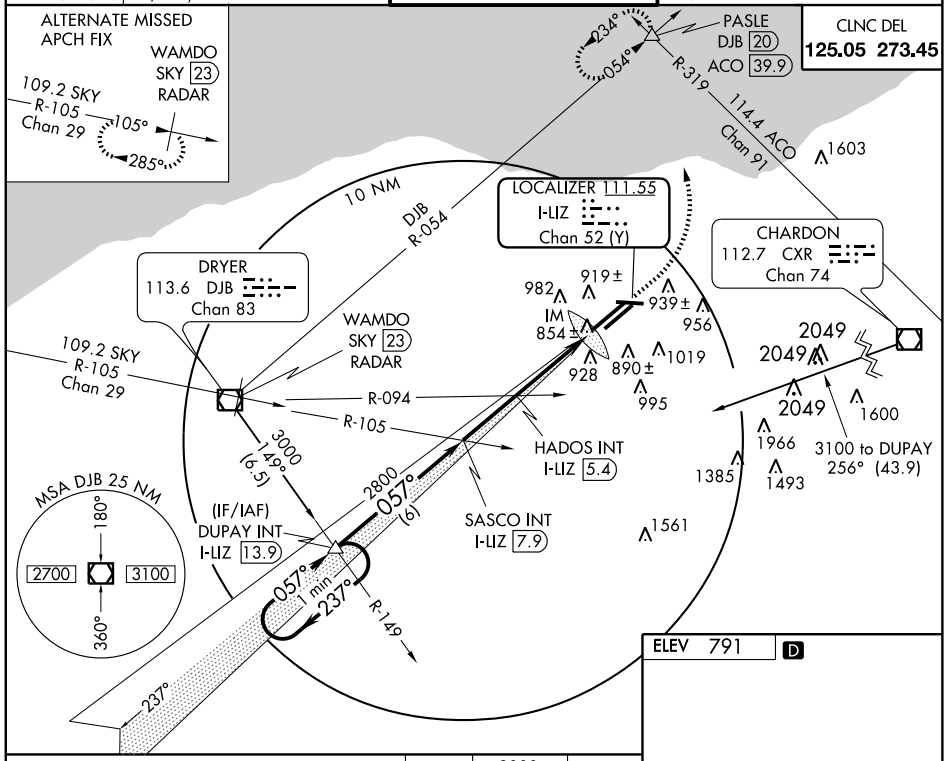
ILS RWY 6L (CAT II)
CLEVELAND-HOPKINS INTL (CLE)

ALSF-2

MISSED APPROACH: Climb to 1800, then climbing left turn to 3000 via heading 350° and DJB R-054 to PASLE Int/20 DME and hold

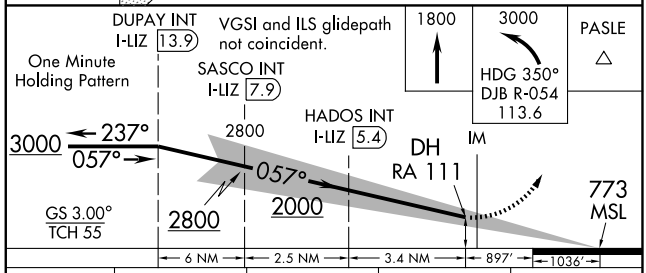
ATIS	CLEVELAND APP CON	CLEVELAND TOWER	GND CON
ARR 127.85	6R/24L, 28 124.0 354.025	6R/24L, 10/28 120.9 273.45	6R/24L, 10/28 121.7 273.45
DEP 132.375	6L/24R, 10 126.55 354.025	6L/24R 124.5 273.45	6L/24R 133.6 273.45

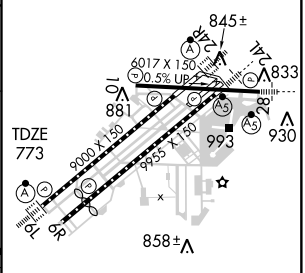
CLNC DEL 125.05 273.45



EC-2, 14 JAN 2010 to 11 FEB 2010

ELEV 791 D





CATEGORY	A	B	C	D
S-ILS 6L	RA 111/12 100 DA 873			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

TDZ/CL Rwy 6R, 6L, and 24R
REIL Rwy 28
HIRL Rwys 10-28, 6R-24L, and 6L-24R

LOC/DME I-LIZ	APP CRS	Rwy ldg	9000
111.55	057°	TDZE	773
Chan 52 (Y)		Apt Elev	791

ILS RWY 6L (CAT III)

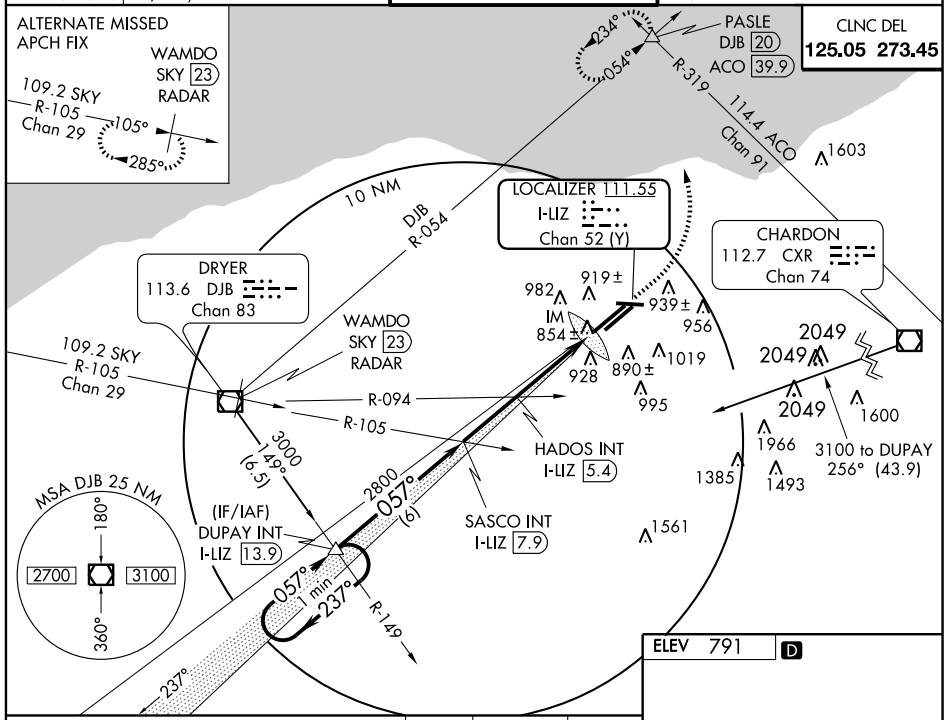
CLEVELAND-HOPKINS INTL (CLE)

ALSF-2

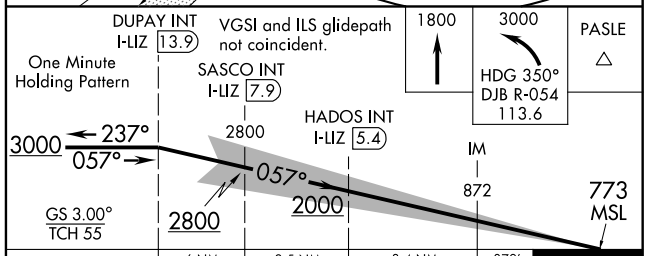
MISSED APPROACH: Climb to 1800, then climbing left turn to 3000 via heading 350° and DJB R-054 to PASLE Int/20 DME and hold

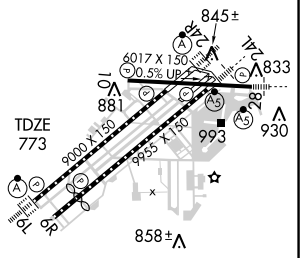
ATIS	CLEVELAND APP CON		CLEVELAND TOWER		GND CON	
ARR 127.85	6R/24L, 28	124.0 354.025	6R/24L, 10/28	120.9 273.45	6R/24L, 10/28	121.7 273.45
DEP 132.375	6L/24R, 10	126.55 354.025	6L/24R	124.5 273.45	6L/24R	133.6 273.45

CLNC DEL 125.05 273.45



ELEV 791 D





CATEGORY	A	B	C	D
S-ILS 6L	CAT IIIa RVR 07			
S-ILS 6L	CAT IIIb RVR 06			
S-ILS 6L	CAT IIIc NA			

CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

TDZ/CL Rwy 6R, 6L, and 24R
REIL Rwy 28
HIRL Rwys 10-28, 6R-24L, and 6L-24R

EC-2, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-PVY	APP CRS	Rwy ldg	9000
111.55	237°	TDZE	780
Chan 52(Y)		Apt Elev	791

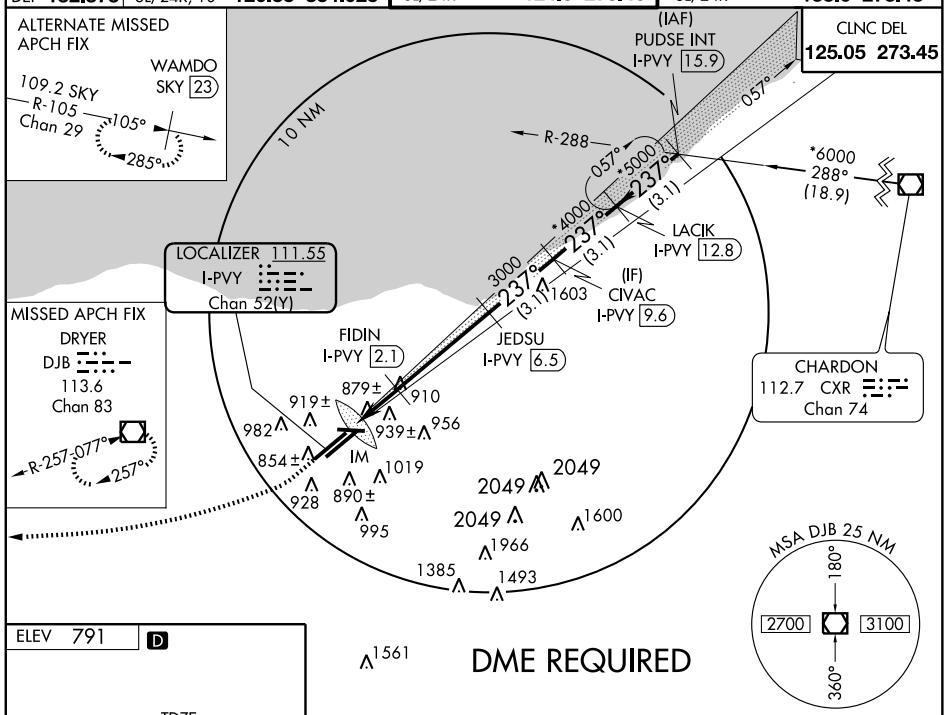
ILS RWY 24R (CAT II)

CLEVELAND-HOPKINS INTL (CLE)

ALSF-2

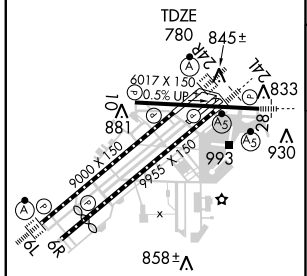
MISSED APPROACH: Climb to 1700, then climbing right turn to 3000 direct DJB VOR/DME and hold.

ATIS	CLEVELAND APP CON		CLEVELAND TOWER		GND CON	
ARR 127.85	6R/24L, 28	124.0 354.025	6R/24L, 10/28	120.9 273.45	6R/24L, 10/28	121.7 273.45
DEP 132.375	6L/24R, 10	126.55 354.025	6L/24R	124.5 273.45	6L/24R	133.6 273.45



EC-2, 14 JAN 2010 to 11 FEB 2010

ELEV 791 D



TDZ/CL Rwy 6R, 6L, and 24R
REIL Rwy 28
HIRL Rwys 10-28, 6R-24L, and 6L-24R

1700	3000	DJB 113.6

*When assigned by ATC, intercept glidepath at CIVAC, 4000; or LACIK, 5000; or PUDSE, 6000.

VGSI and ILS glidepath not coincident.

780 MSL

IM — DH RA 100 — FIDIN I-PVY 2.1 — 1600** — JEDSU I-PVY 6.5 — 3000 — CIVAC I-PVY 9.6 — 4000* — LACIK I-PVY 12.8 — 5000* — PUDSE INT I-PVY 15.9 — 6000*

237°

Procedure Turn NA

GS 3.00°

TCH 51

**LOC only.

1064' — 937' — 2.2 NM — 4.4 NM — 3.1 NM — 3.1 NM — 3.1 NM

CATEGORY	A	B	C	D
S-ILS 24R	RA 100/12 100 DA 880			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

LOC/DME I-PVY	APP CRS	Rwy ldg	9000
111.55	237°	TDZE	780
Chan 52(Y)		Apt Elev	791

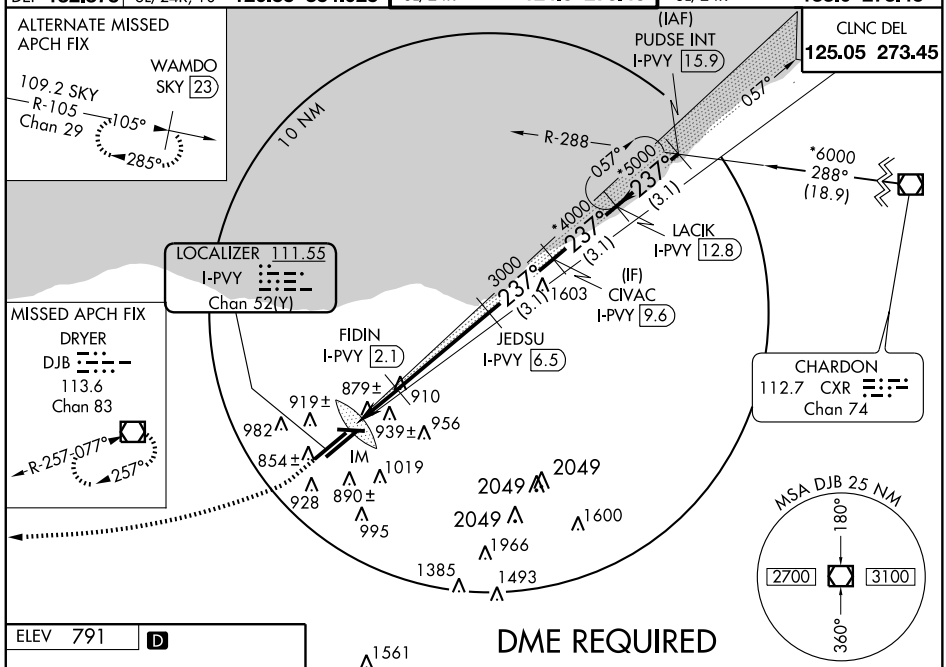
ILS RWY 24R (CAT III)

CLEVELAND-HOPKINS INTL (CLE)

ALSF-2

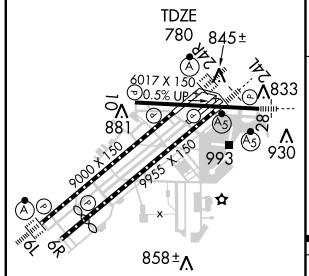
MISSED APPROACH: Climb to 1700, then climbing right turn to 3000 direct DJB VOR/DME and hold.

ATIS	CLEVELAND APP CON		CLEVELAND TOWER		GND CON	
ARR 127.85	6R/24L, 28	124.0 354.025	6R/24L, 10/28	120.9 273.45	6R/24L, 10/28	121.7 273.45
DEP 132.375	6L/24R, 10	126.55 354.025	6L/24R	124.5 273.45	6L/24R	133.6 273.45



DME REQUIRED

ELEV 791 D



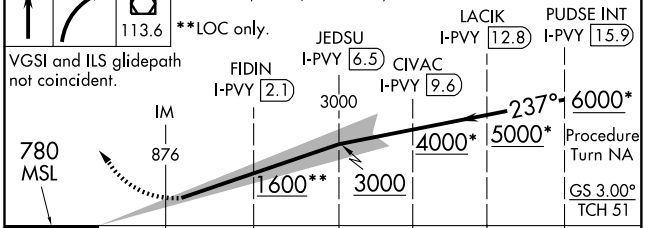
TDZ/CL Rwy 6R, 6L, and 24R
REIL Rwy 28
HIRL Rwys 10-28, 6R-24L, and 6L-24R

1700	3000	DJB 113.6

VGSI and ILS glidepath not coincident.

*When assigned by ATC, intercept glidepath at CIVAC, 4000; or LACIK, 5000; or PUDSE, 6000.

**LOC only.



CATEGORY	A	B	C	D
S-ILS 24R	CAT IIIa RVR 07			
S-ILS 24R	CAT IIIb RVR 06			
S-ILS 24R	CAT IIIc NA			

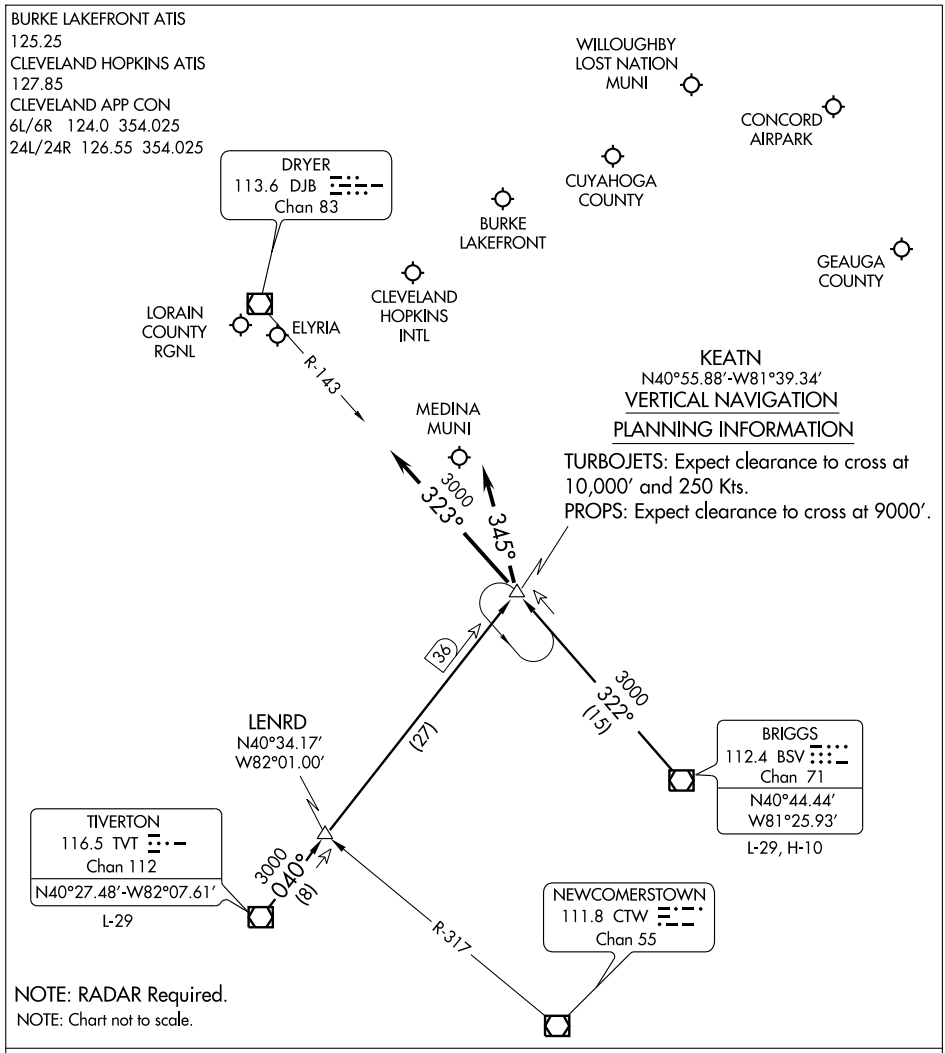
CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

EC-2, 14 JAN 2010 to 11 FEB 2010

KEATN FOUR ARRIVAL

ST-84 (FAA)

CLEVELAND, OHIO



ARRIVAL ROUTE DESCRIPTION

BRIGGS TRANSITION (BSV.KEATN4): From over BSV VOR/DME via BSV R-322 to KEATN INT. Thence. . . .
TIVERTON TRANSITION (TVT.KEATN4): From over TVT VOR/DME via TVT R-040 to KEATN INT. Thence. . . .

LANDING CLE RWY 24L/R: . . . .Depart KEATN INT heading 345°. Expect radar vectors to final approach course.
LANDING CLE RWY 6L/R: . . . .Depart KEATN INT via DJB R-143 to DJB VOR/DME. Expect radar vectors to final approach course.
LANDING ALL OTHER AIRPORTS: . . . .From KEATN INT expect radar vectors to final approach course.

EC-2, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-EYU	APP CRS	Rwy ldg	8029
111.35	054°	TDZE	777
Chan 50 (Y)		Apt Elev	791

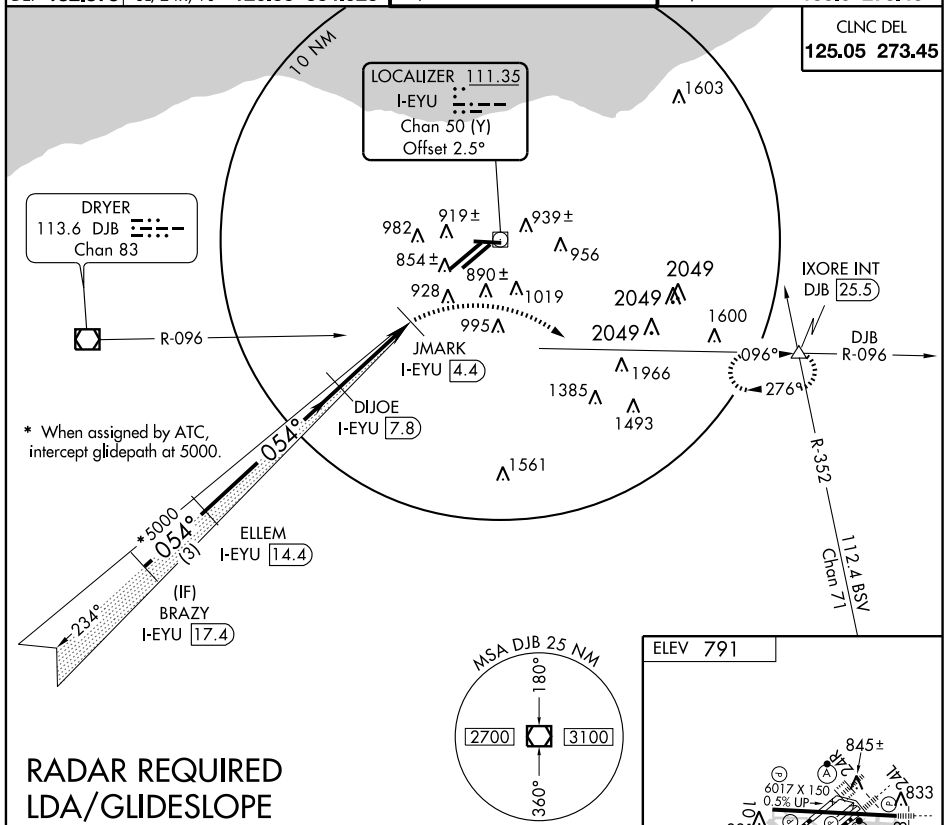
LDA/DME RWY 6R
CLEVELAND-HOPKINS INTL (CLE)

Runway 6L and 6R separated by 1241 feet centerline to centerline. Inoperative table does not apply. Procedure NA when glideslope not available. Visibility reduction by helicopters NA.

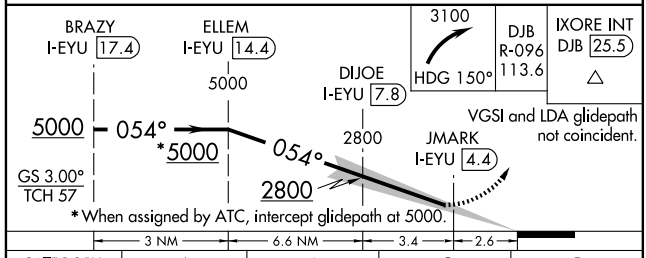
MISSED APPROACH: Climbing right turn to 3100 via heading 150° and DJB VOR/DME R-096 to IXORE INT/DJB 25.5 DME and hold.

ATIS	CLEVELAND APP CON			CLEVELAND TOWER			GND CON		
ARR 127.85	6R/24L, 28	124.0	354.025	6R/24L, 10/28	120.9	273.45	6R/24L, 10/28	121.7	273.45
DEP 132.375	6L/24R, 10	126.55	354.025	6L/24R	124.5	273.45	6L/24R	133.6	273.45

CLNC DEL 125.05 273.45



RADAR REQUIRED
LDA/GLIDESLOPE



CATEGORY	A	B	C	D
S-LDA/GS 6R	1691-3 914 (900-3)			NA

TDZ/CL Rwy 6R, 6L, and 24R
REIL Rwy 28
HIRL Rwys 10-28, 6R-24L, and 6L-24R

EC-2, 14 JAN 2010 to 11 FEB 2010

LDA/DME RWY 24L
CLEVELAND-HOPKINS INTL (CLE)

LOC/DME I-FVZ	APP CRS	Rwy ldg	9955
111.35	239°	TDZE	786
Chan 50 (Y)		Apt Elev	791

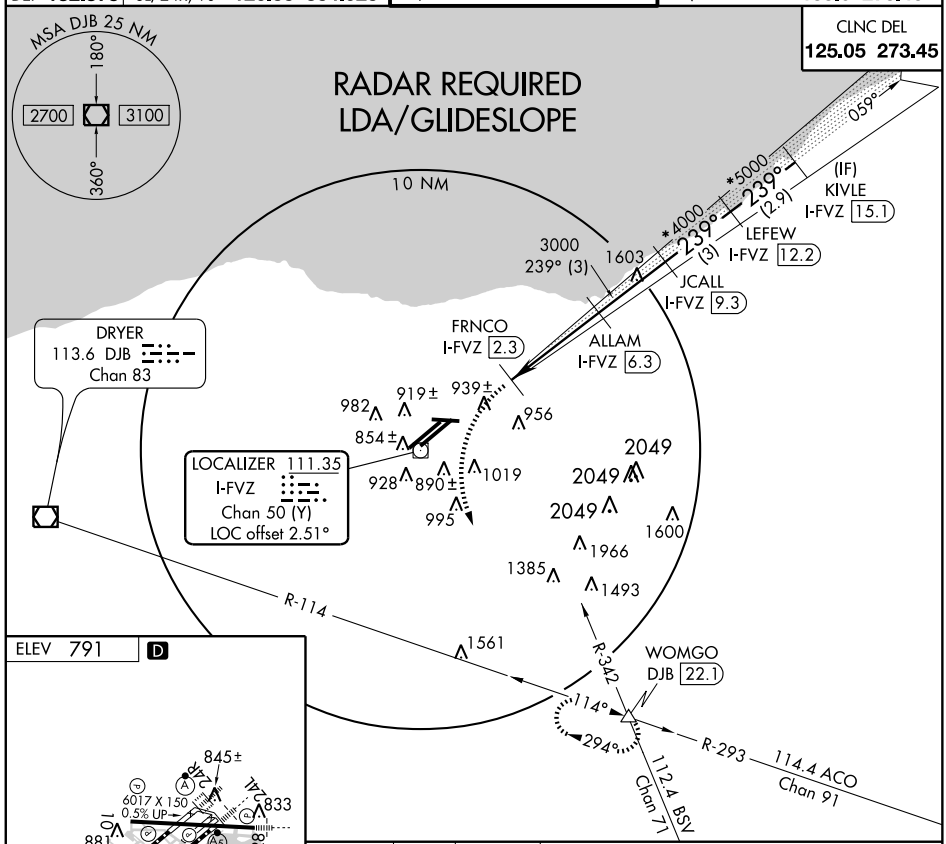
Inoperative table does not apply.
NA
Runway 24L and 24R separated by 1241 feet centerline to centerline.
Procedure NA when glideslope not available.

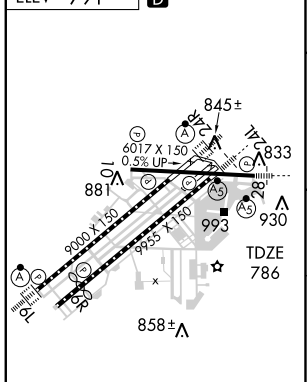
MALSR

MISSED APPROACH: Climbing left turn to 3100 via heading 170° and DJB VOR/DME R-114 to WOMGO INT/DJB 22.1 DME and hold.

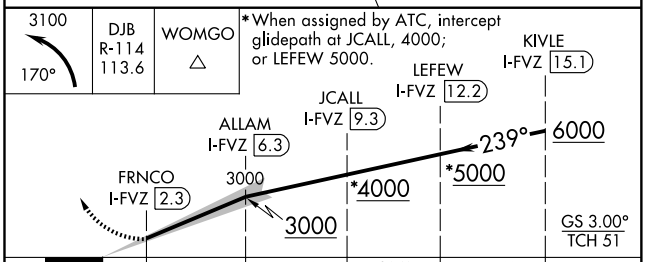
ATIS	CLEVELAND APP CON			CLEVELAND TOWER			GND CON		
ARR 127.85	6R/24L, 28	124.0	354.025	6R/24L, 10/28	120.9	273.45	6R/24L, 10/28	121.7	273.45
DEP 132.375	6L/24R, 10	126.55	354.025	6L/24R	124.5	273.45	6L/24R	133.6	273.45

CLNC DEL 125.05 273.45





TDZ/CL Rwy 6R, 6L, and 24R
REIL Rwy 28
HIRL Rwys 10-28, 6R-24L, and 6L-24R



CATEGORY	A	B	C	D
S-LDA/GS 24L	1700-3 914 (1000-3)			NA

CLEVELAND, OHIO

AL-84 (FAA)

LDA PRM RWY 6R (SIMULTANEOUS CLOSE PARALLEL)

CLEVELAND-HOPKINS INTL (CLE)

LOC/DME I-EYU	APP CRS	Rwy ldg	8029
111.35	054°	TDZE	777
Chan 50 (Y)		Apt Elev	791

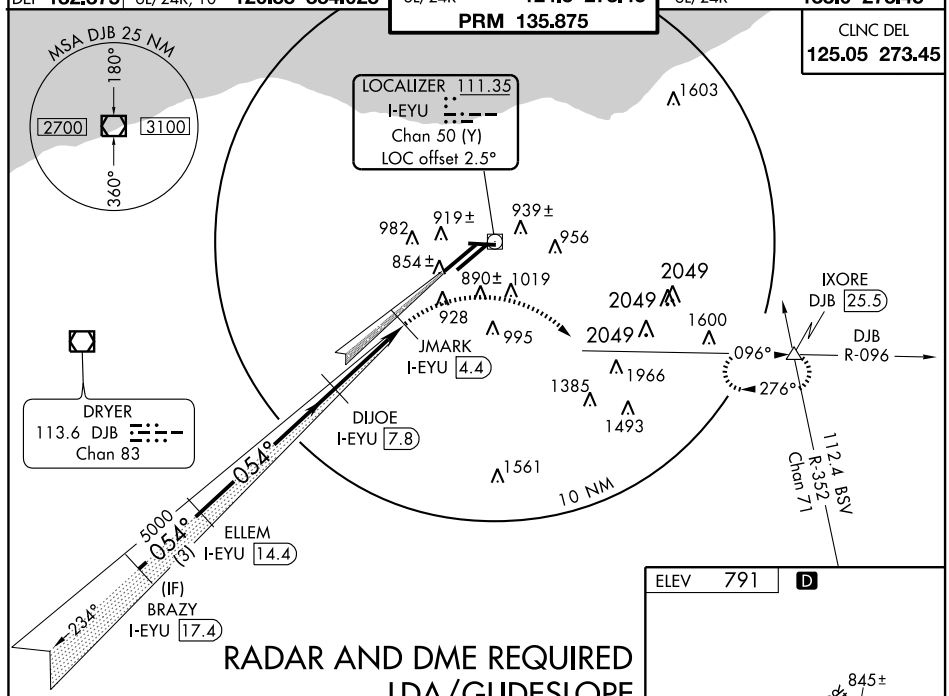
NA

Procedure NA when glideslope not available. Simultaneous close parallel approach authorized with ILS PRM Rwy 6L. Dual VHF Comm required. See additional requirements on AAUP. Inoperative table does not apply. Runway 6R and 6L separated by 1241 feet centerline to centerline.

MISSED APPROACH: Climbing right turn to 3100 via heading 150° and DJB VOR/DME R-096 to IXORE INT/DJB 25.5 DME and hold.

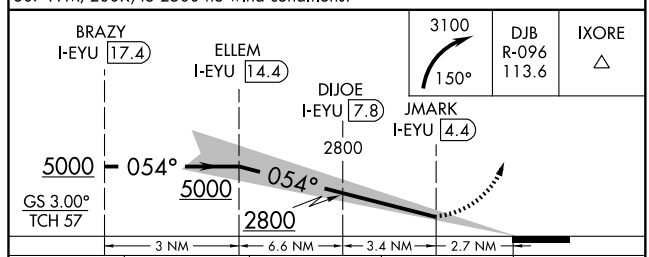
ATIS	CLEVELAND APP CON	CLEVELAND TOWER	GND CON
ARR 127.85	6R/24L, 28 124.0 354.025	6R/24L, 10/28 120.9 273.45	6R/24L, 10/28 121.7 273.45
DEP 132.375	6L/24R, 10 126.55 354.025	6L/24R 124.5 273.45	6L/24R 133.6 273.45
		PRM 135.875	

CLNC DEL 125.05 273.45

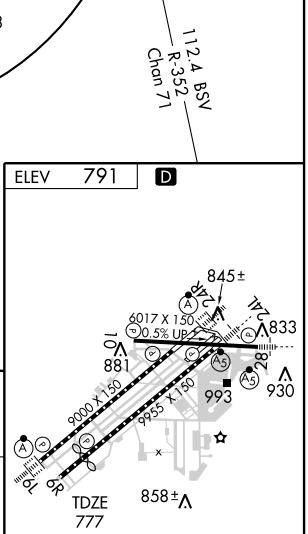


RADAR AND DME REQUIRED LDA/GLIDESLOPE

If go around executed after crossing JMARK, obstacles in missed approach area requires a rate of climb of at least 404 FPM/100K, 605 FPM/150K, 807 FPM/200K, to 2500 no wind conditions.



CATEGORY	A	B	C	D
S-LDA/GS 6R	1691-3 914 (1000-3)			NA



TDZ/CL Rwy 6R, 6L, and 24R
REIL Rwy 28
HIRL Rwys 10-28, 6R-24L, and 6L-24R

ATTENTION ALL USERS OF LDA PRECISION RUNWAY MONITOR (PRM)

Special pilot training required. Pilots who are unable to participate, or dispatchers on their behalf, must contact the FAA Command Center prior to departure (1-800-333-4286 or 703-904-4452) to obtain an arrival reservation. Non-participating pilots enroute to CLE as an alternate, or trained pilots that are unexpectedly unable to participate due to in-flight circumstances will be afforded appropriate arrival services as operational conditions permit and shall notify the Cleveland ARTCC as soon as practical, but at least 100 miles from CLE.

Condensed Briefing Points:

-- When instructed, immediately switch to the tower frequency and select the monitor frequency audio.
-- Report the ILS traffic in sight as soon as practical and prior to JMARK. DO NOT PASS.
-- Remain on the LDA until passing the LDA MAP so as not to penetrate the NTZ.

1. **ATIS.** When the ATIS broadcast advises that simultaneous ILS PRM and LDA PRM approaches are in progress, pilots should brief to fly the LDA PRM approach. If later advised to expect an LDA DME approach, the LDA/PRM chart may be used after completing the following briefing items:

(a) Minimums and missed approach procedures are unchanged.
(b) Monitor frequency no longer required.
(c) Lower LDA intercept altitudes may be assigned when advised to expect LDA DME 6R approach.

Simultaneous parallel approaches will only be offered/conducted when the weather is at least 1,200 feet (ceiling), and 3 miles (visibility).

2. **Dual VHF Communication required.** To avoid blocked transmissions, each runway will have two frequencies, a primary and a monitor frequency. The tower controller will transmit on both frequencies. The Monitor controller's transmissions, if needed, will override both frequencies. Pilots will ONLY transmit on the tower controller's frequency, but will listen to both frequencies. Select the monitor frequency audio only when instructed by ATC to contact the tower. The volume levels should be set about the same on both radios so that the pilots will be able to hear transmissions on at least one frequency if the other is blocked. If executing a missed approach at JMARK, begin the turn as soon as practical.

3. **All "Breakouts" are to be hand flown** to assure that the maneuver is accomplished in the shortest amount of time. Pilots, when directed by ATC to break off an approach, must assume that an aircraft is blundering toward their course and a breakout must be initiated immediately.

(a) ATC Directed "Breakouts:" ATC directed breakouts will consist of a turn and a climb or descent. Pilots must always initiate the breakout in response to an air traffic controller instruction. Controllers will give a descending breakout only when there are no other reasonable options available, but in no case will the descent be below minimum vectoring altitude (MVA) which provides at least 1,000 feet required obstuction clearance. The applicable MVA is 2,700 feet at CLE.

(b) Phraseology - "TRAFFIC ALERT:" If an aircraft enters the "NO TRANSGRESSION ZONE (NTZ)," the controller will breakout the threatened aircraft on the adjacent approach. The phraseology for the breakout will be:

"TRAFFIC ALERT, (aircraft call sign) TURN (left/right) IMMEDIATELY, HEADING (degrees), CLIMB/DESCEND AND MAINTAIN (altitude)".

4. **CLE LDA Visual Segment.** If advised that there is traffic on the 6L ILS, pilots may continue past the LDA MAP if:

a) the ILS traffic is in sight and is expected to remain in sight.
b) ATC has been advised that "traffic is in sight." (ATC is not required to acknowledge this transmission)
c) the runway environment is in sight.

Otherwise, execute a missed approach at the LDA MAP. Between the LDA MAP and the runway threshold, pilots are responsible for separating themselves visually from the traffic on the ILS approach, which means maneuvering the aircraft as necessary to avoid the ILS traffic until landing (do not pass), and providing wake turbulence avoidance, if applicable. If visual contact with the ILS traffic is lost, advise ATC as soon as practical and execute the published missed approach unless otherwise instructed by ATC.

EC-2, 14 JAN 2010 to 11 FEB 2010

LDA PRM RWY 24L (SIMULTANEOUS CLOSE PARALLEL)

CLEVELAND-HOPKINS INTL (CLE)

LOC/DME I-FVZ	APP CRS	Rwy ldg	9955
111.35	239°	TDZE	786
Chan 50 (Y)		Apt Elev	791

Simultaneous (Close Parallel) approach authorized with ILS PRM Rwy 24R. Dual VHF comm required. Inoperative table does not apply. See additional requirements on adjacent information page. Runways 24L and 24R separated by 1241 feet centerline to centerline. Procedure NA when glideslope not available.

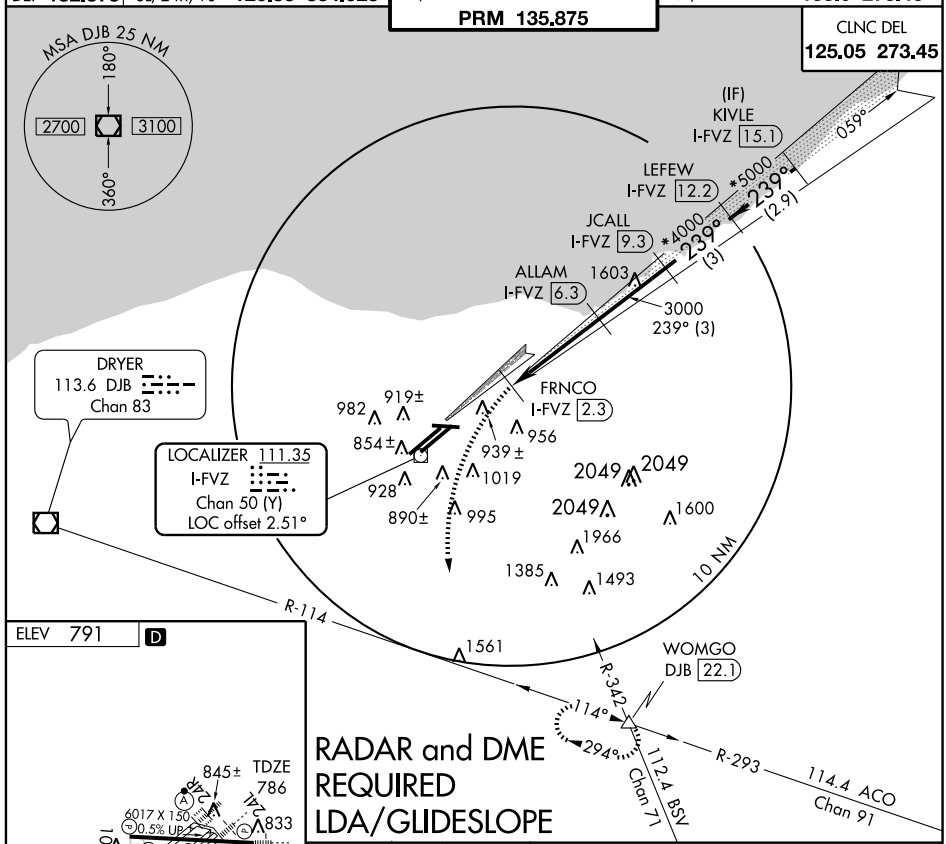
NA

MALSR

MISSED APPROACH: Climbing left turn to 3100 via heading 170° and DJB VOR/DME R-114 to WOMGO INT/DJB 22.1 DME and hold.

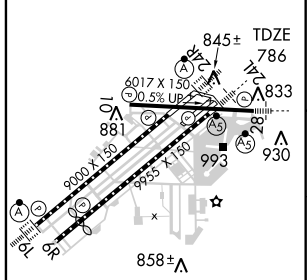
ATIS	CLEVELAND APP CON			CLEVELAND TOWER			GND CON		
ARR 127.85	6R/24L, 28	124.0	354.025	6R/24L, 10/28	120.9	273.45	6R/24L, 10/28	121.7	273.45
DEP 132.375	6L/24R, 10	126.55	354.025	6L/24R	124.5	273.45	6L/24R	133.6	273.45
				PRM 135.875					

CLNC DEL 125.05 273.45



RADAR and DME REQUIRED
LDA/GLIDESLOPE

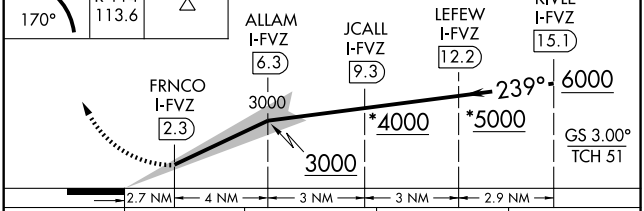
ELEV 791 D



TDZ/CL Rwy 6R, 6L, and 24R
REIL Rwy 28
HIRL Rwys 10-28, 6R-24L, and 6L-24R

3100	DJB R-114 113.6	WOMGO
170°		△

*When assigned by ATC, intercept glidepath at JCALL, 4000; or LEFEW, 5000.



CATEGORY	A	B	C	D
S-LDA/GS	1700-3	914 (1000-3)		NA

ATTENTION ALL USERS PAGE (AAUP)

Condensed Briefing Points:

- **When instructed, immediately switch to tower frequency and select the monitor frequency audio.**
- **Report the ILS traffic in sight as soon as practical and prior to FRNCO. DO NOT PASS.**
- **Remain on the LDA until passing the LDA MAP so as not to penetrate the NTZ.**

1. **ATIS.** When the ATIS broadcast advises that simultaneous ILS PRM and LDA PRM approaches are in progress, pilots should brief to fly the LDA PRM approach. If later advised to expect an LDA DME approach, the LDA/PRM chart may be used after completing the following briefing items:

   a. **Minimums and missed approach procedures are unchanged.**
   b. **Monitor frequency no longer required.**
   c. **Lower LDA intercept altitudes may be assigned when advised to expect LDA DME 24L approach.**

   Simultaneous parallel approaches will only be offered/conducted when the weather is at least 1,200 feet (ceiling), and 3 miles (visibility).

2. **Dual VHF Communication required.** To avoid blocked transmissions, each runway will have two frequencies, a primary and a monitor frequency. The tower controller will transmit on both frequencies. The Monitor controller's transmissions, if needed, will override both frequencies. Pilots will ONLY transmit on the tower controller's frequency, but will listen to both frequencies. Select the monitor frequency audio only when instructed by ATC to contact the tower. The volume levels should be set about the same on both radios so that the pilots will be able to hear transmissions on at least one frequency if the other is blocked. If executing a missed approach at FRNCO, begin the turn as soon as practical.

3. **All "Breakouts" are to be hand flown** to assure that the maneuver is accomplished in the shortest amount of time. Pilots, when directed by ATC to break off an approach, must assume that an aircraft is blundering toward their course and a breakout must be initiated immediately.

   (a) ATC Directed "Breakouts:" ATC directed breakouts will consist of a turn and a climb or descent. Pilots must always initiate the breakout in response to an air traffic controller instruction. Controllers will give a descending breakout only when there are no other reasonable options available, but in no case will the descent be below minimum vectoring altitude (MVA) which provides at least 1,000 feet required obstruction clearance. The applicable MVA is 2,700 feet at CLE.

   (b) Phraseology - "TRAFFIC ALERT:" If an aircraft enters the "NO TRANSGRESSION ZONE (NTZ)," the controller will breakout the threatened aircraft on the adjacent approach. The phraseology for the breakout will be:

   "TRAFFIC ALERT, (aircraft call sign) TURN (left/right) IMMEDIATELY, HEADING (degrees), CLIMB/DESCEND AND MAINTAIN (altitude)".

4. **Glide Slope Navigation:** Descending on the glide slope ensures compliance with any charted crossing restrictions.

5. **CLE LDA Visual Segment:** If advised that there is traffic on the 24R ILS, pilots may continue past the LDA MAP if:
   a) the ILS traffic is in sight and is expected to remain in sight,
   b) ATC has been advised that "traffic is in sight." (ATC is not required to acknowledge this transmission)
   c) the runway environment is in sight.

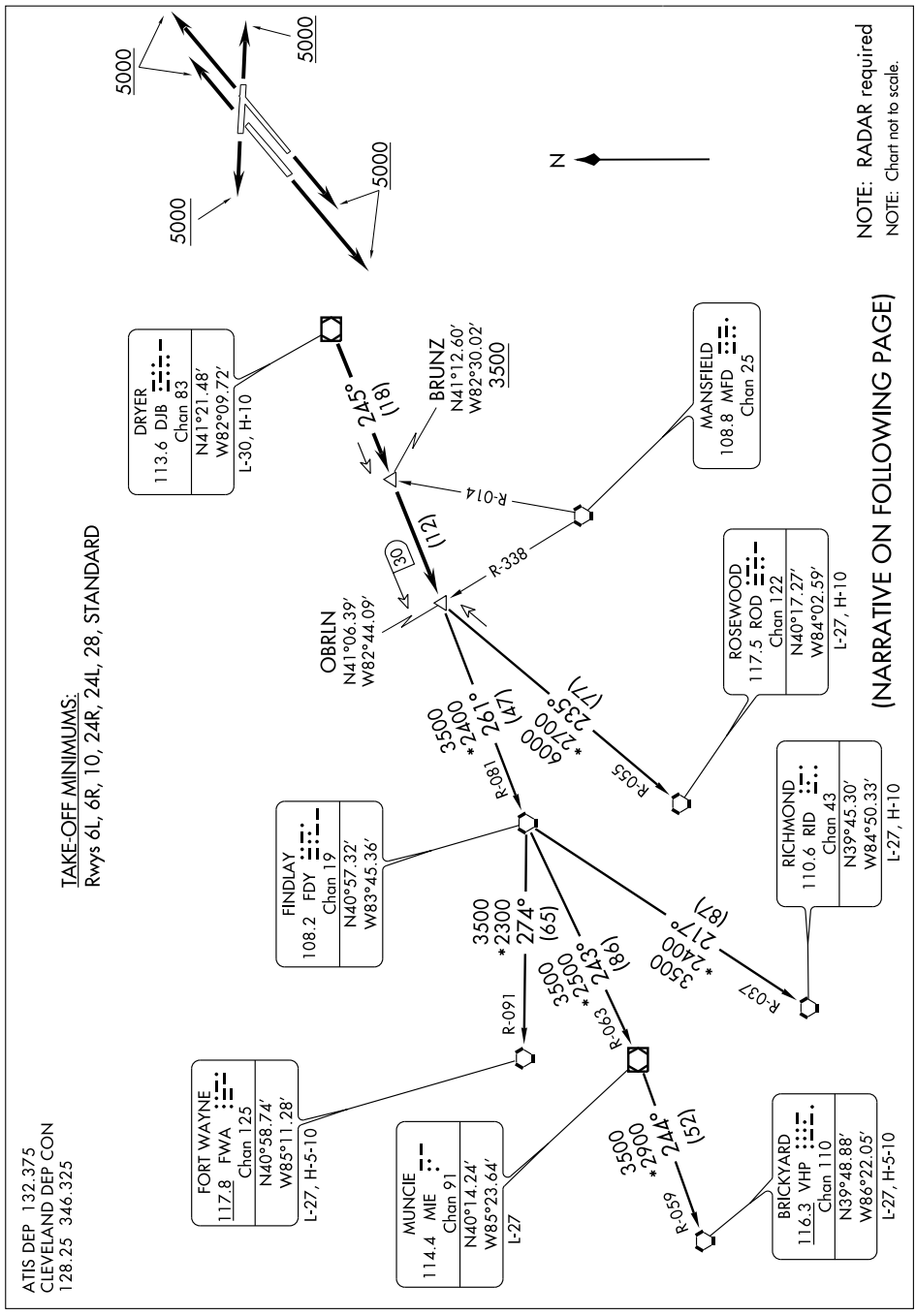
Otherwise, execute a missed approach at the LDA MAP. Between the LDA MAP and the runway threshold, pilots are responsible for separating themselves visually from the traffic on the ILS approach, which means maneuvering the aircraft as necessary to avoid the ILS traffic until landing (do not pass), and providing wake turbulence avoidance, if applicable. If visual contact with the ILS traffic is lost, advise ATC as soon as practical and execute the published missed approach unless otherwise instructed by ATC.

Special pilot training required. Pilots who are unable to participate, or dispatchers on their behalf, must contact the FAA Command Center prior to departure (1-800-333-4286 or 703-904-4452) to obtain an arrival reservation. Non-participating pilots enroute to CLE as an alternate, or trained pilots that are unexpectedly unable to particpate due to inflight circumstances will be afforded appropriate arrival services as operational conditions permit and shall notify the Cleveland ARTCC as soon as practical, but at least 100 miles from CLE.

EC-2, 14 JAN 2010 to 11 FEB 2010

OBRLN TWO DEPARTURE

CLEVELAND-HOPKINS INTL (CLE)
CLEVELAND, OHIO



OBRLN TWO DEPARTURE

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 6L, 6R, 10, 24R, 24L, 28: Climb via assigned heading to 5000 thence. . .

. . . . or assigned altitude for vectors to intercept DJB VOR/DME R-245, cross BRUNZ INT at or above 3500 then proceed to OBRLN INT then via (transition). Expect filed altitude/flight level ten (10) minutes after departure.

BRICKYARD TRANSITION (OBRLN2.VHP): From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-243 and MIE R-063 to MIE VOR/DME, then via MIE R-244 and VHP R-059 to VHP VORTAC.
FORT WAYNE TRANSITION (OBRLN2.FWA): (For use by Fort Wayne arrivals only and ATC use as assigned.) From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-274 and FWA R-091 to FWA VORTAC.
MUNCIE TRANSITION (OBRLN2.MIE): (For use by Indianapolis arrivals only and ATC use as assigned). From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-243 and MIE R-063 to MIE VOR/DME.
RICHMOND TRANSITION (OBRLN2.RID): From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-217 and RID R-037 to RID VORTAC.
ROSEWOOD TRANSITION (OBRLN2.ROD): (For use at or below FL220 only and ATC use as assigned). From over OBRLN INT via ROD R-055 to ROD VORTAC.

TAKE-OFF OBSTACLES:

Rwy 10: Multiple Signs beginning 1237′ from DER, 717′ left of centerline, up to 68′ AGL/857′ MSL.
Light Pole 1746′ from DER, 786′ right of centerline, 53′ AGL/842′ MSL.
Tower 4157′ from DER, 1456′ right of centerline, 137′ AGL/922′ MSL.

Rwy 28: Vehicle on road 304′ from DER, 3′ left of centerline, 14′ AGL/773′ MSL.
Antenna on building 308′ from DER, 240′ left of centerline, 13′ AGL/775′ MSL.
Multiple Trees beginning 1046′ from DER, 105′ left of centerline, up to 60′ AGL/819′ MSL. Tower 2640′ from DER, 946′ right of centerline, 80′ AGL/840′ MSL.

Rwy 24R: Tower 2565′ from DER, 1028′ right of centerline, 191′ AGL/870′ MSL.
Multiple Trees beginning 3653′ from DER, 857′ left of centerline, up to 103′ AGL/870′ MSL.

Rwy 24L: Multiple Trees and Poles beginning 1903′ from DER, 5′ left of centerline, up to 89′ AGL/849′ MSL.

WAAS CH 56204 W06A	APP CRS 057°	Rwy ldg 9000 TDZE 773 Apt Elev 791

RNAV (GPS) RWY 6L
CLEVELAND-HOPKINS INTL (CLE)

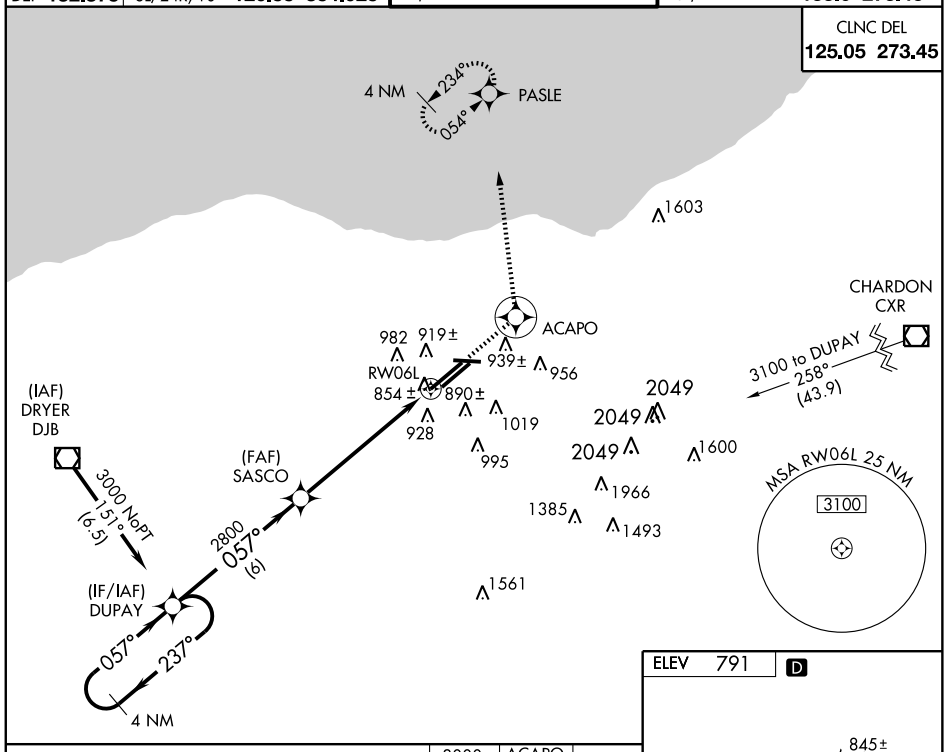
DME/DME RNP-0.3 NA.
Baro-VNAV NA below -16°C (4°F)

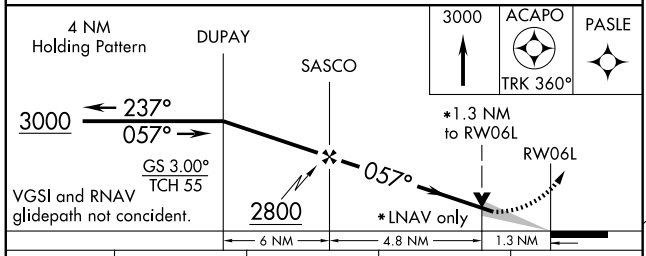
ALSF-2

MISSED APPROACH: Climb to 3000 direct ACAPO, then via 360° track to PASLE and hold.

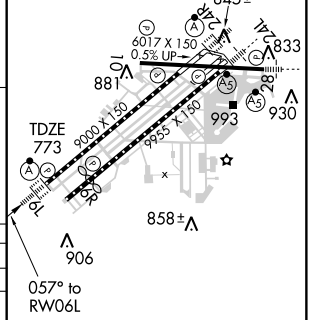
ATIS	CLEVELAND APP CON	CLEVELAND TOWER	GND CON
ARR 127.85	6R/24L, 28 124.0 354.025	6R/24L, 10/28 120.9 273.45	6R/24L, 10/28 121.7 273.45
DEP 132.375	6L/24R, 10 126.55 354.025	6L/24R 124.5 273.45	6L/24R 133.6 273.45

CLNC DEL 125.05 273.45





CATEGORY	A	B	C	D
LPV DA	1110/40 337 (400-¾)			
LNAV/VNAV DA	1220/50 447 (500-1)			
LNAV MDA	1240/24 467 (500-½)		1240/40 467 (500-¾)	1240/50 467 (500-1)
CIRCLING	1300-1½ 509 (600-1½)			1380-2 589 (600-2)



TDZ/CL Rwy 6R, 6L, and 24R
REIL Rwy 28
HIRL Rwys 10-28, 6R-24L, and 6L-24R

EC-2, 14 JAN 2010 to 11 FEB 2010

WAAS CH 81806 W06B	APP CRS 057°	Rwy ldg 8029 TDZE 777 Apt Elev 791

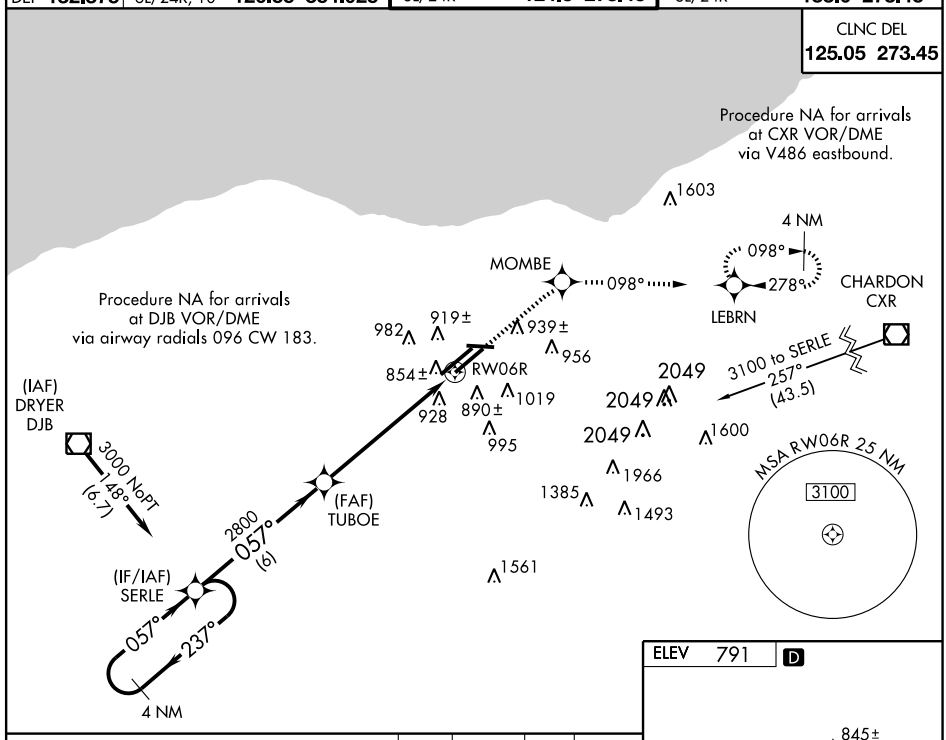
RNAV (GPS) RWY 6R
CLEVELAND-HOPKINS INTL (CLE)

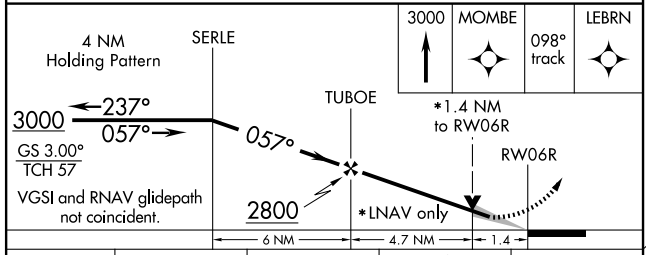
For inoperative MALSR, increase LPV all Cats visibility to RVR 6000.
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA.

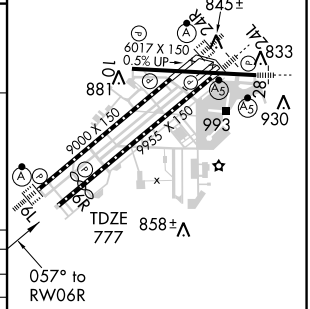
MISSED APPROACH:
Climb to 3000 direct MOMBE and via 098° track to LEBRN and hold.

ATIS	CLEVELAND APP CON		CLEVELAND TOWER		GND CON	
ARR 127.85	6R/24L, 28	124.0 354.025	6R/24L, 10/28	120.9 273.45	6R/24L, 10/28	121.7 273.45
DEP 132.375	6L/24R, 10	126.55 354.025	6L/24R	124.5 273.45	6L/24R	133.6 273.45

CLNC DEL 125.05 273.45







CATEGORY	A	B	C	D
LPV DA	1104/40 327 (400-¾)			
LNAV/VNAV DA	1215/50 438 (500-1)			
LNAV MDA	1260/24 483 (500-½)		1260/40 483 (500-¾)	1260/50 483 (500-1)
CIRCLING	1300-1 509 (600-1)		1300-1½ 509 (600-1½)	1360-2 569 (600-2)

TDZ/CL Rwy 6R, 6L, and 24R
REIL Rwy 28
HIRL Rwys 10-28, 6R-24L, and 6L-24R

EC-2, 14 JAN 2010 to 11 FEB 2010

WAAS CH 69209 W10A	APP CRS 100°	Rwy ldg 6017 TDZE 782 Apt Elev 791

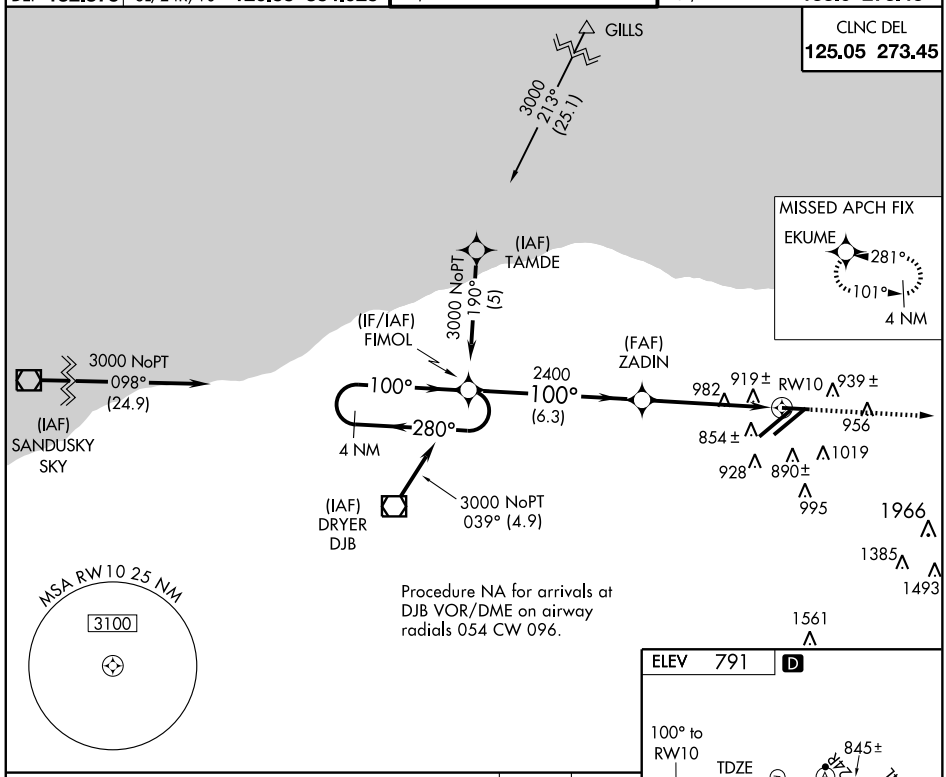
RNAV (GPS) RWY 10
CLEVELAND-HOPKINS INTL (CLE)

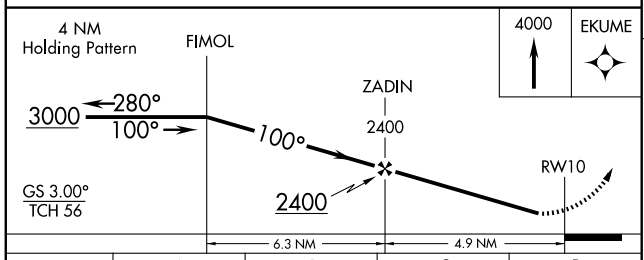
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

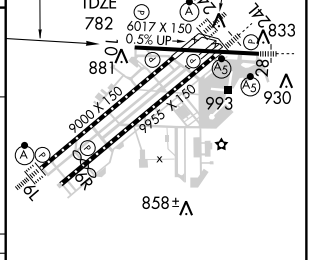
MISSED APPROACH: Climb to 4000 direct EKUME and hold.

ATIS	CLEVELAND APP CON	CLEVELAND TOWER	GND CON
ARR 127.85	6R/24L, 28 124.0 354.025	6R/24L, 10/28 120.9 273.45	6R/24L, 10/28 121.7 273.45
DEP 132.375	6L/24R, 10 126.55 354.025	6L/24R 124.5 273.45	6L/24R 133.6 273.45

CLNC DEL 125.05 273.45







CATEGORY	A	B	C	D
LPV DA	1174 - 1½ 392 (400-1½)			
LNAV/VNAV DA	1230 - 1½ 448 (500-1½)			
LNAV MDA	1420 - 1 638 (700-1)		1420 - 1¾ 638 (700-1¾)	1420 - 2 638 (700-2)

TDZ/CL Rwy 6R, 6L, and 24R
REIL Rwy 28
HIRL Rwys 10-28, 6R-24L, and 6L-24R

EC-2, 14 JAN 2010 to 11 FEB 2010

WAAS CH 77506 W24B	APP CRS 237°	Rwy ldg 9955 TDZE 787 Apt Elev 791

RNAV (GPS) RWY 24L
CLEVELAND-HOPKINS INTL (CLE)

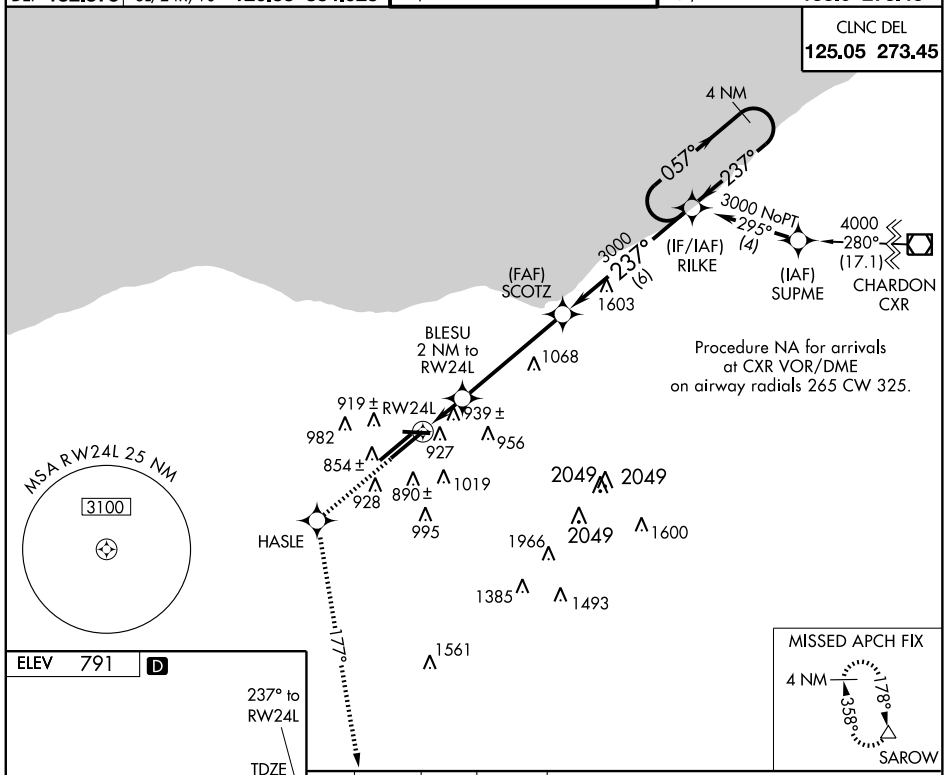
For inoperative MALSR, increase LPV visibility to RVR 5000 all Cats. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA.

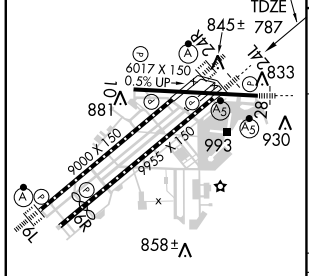
MALSR

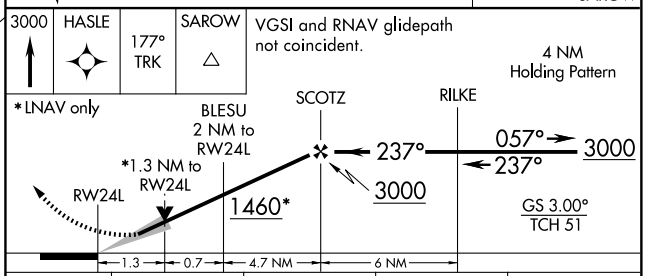
MISSED APPROACH: Climb to 3000 direct HASLE and via 177° track to SAROW and hold.

ATIS	CLEVELAND APP CON			CLEVELAND TOWER			GND CON		
ARR 127.85	6R/24L, 28	124.0	354.025	6R/24L, 10/28	120.9	273.45	6R/24L, 10/28	121.7	273.45
DEP 132.375	6L/24R, 10	126.55	354.025	6L/24R	124.5	273.45	6L/24R	133.6	273.45

CLNC DEL 125.05 273.45







CATEGORY	A	B	C	D
LPV DA	1098/24 311 (400-½)			
LNAV/VNAV DA	1280/60 493 (500-1¼)			
LNAV MDA	1260/24 473 (500-½)		1260/40 473 (500-¾)	1260/50 473 (500-1)

TDZ/CL Rwy 6R, 6L, and 24R
REIL Rwy 28
HIRL Rwys 10-28, 6R-24L, and 6L-24R

WAAS CH 60904 W24A	APP CRS 237°	Rwy ldg 9000 TDZE 780 Apt Elev 791

RNAV (GPS) RWY 24R
CLEVELAND-HOPKINS INTL (CLE)

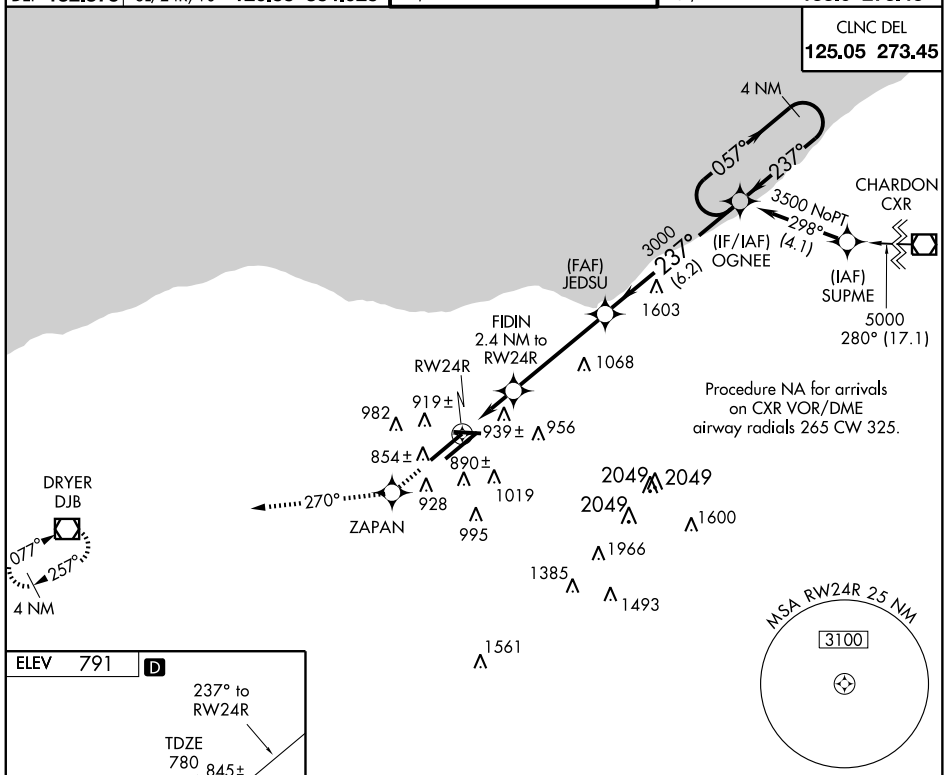
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F) DME/DME RNP-0.3 NA.

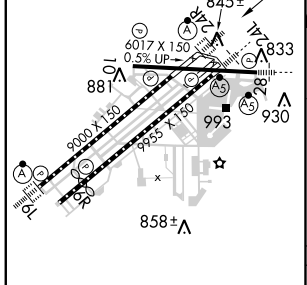
ALSF-2

MISSED APPROACH: Climb to 3000 direct ZAPAN and via 270° track to DJB VOR/DME and hold.

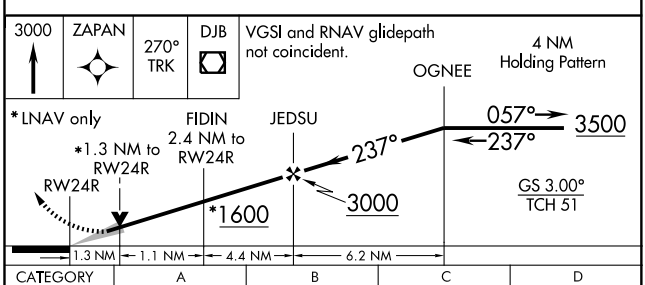
ATIS	CLEVELAND APP CON			CLEVELAND TOWER			GND CON		
ARR 127.85	6R/24L, 28	124.0	354.025	6R/24L, 10/28	120.9	273.45	6R/24L, 10/28	121.7	273.45
DEP 132.375	6L/24R, 10	126.55	354.025	6L/24R	124.5	273.45	6L/24R	133.6	273.45

CLNC DEL 125.05 273.45





TDZ/CL Rwy 6R, 6L, and 24R
REIL Rwy 28
HIRL Rwys 10-28, 6R-24L, and 6L-24R



CATEGORY	A	B	C	D
LPV DA	1030/24 250 (300-½)			
LNAV/VNAV DA	1243/50 463 (500-1)			
LNAV MDA	1260/24 480 (500-½)		1260/40 480 (500-¾)	1260/50 480 (500-1)

WAAS CH 40109 W28A	APP CRS 280°	Rwy ldg 6017 TDZE 791 Apt Elev 791

RNAV (GPS) RWY 28
CLEVELAND-HOPKINS INTL (CLE)

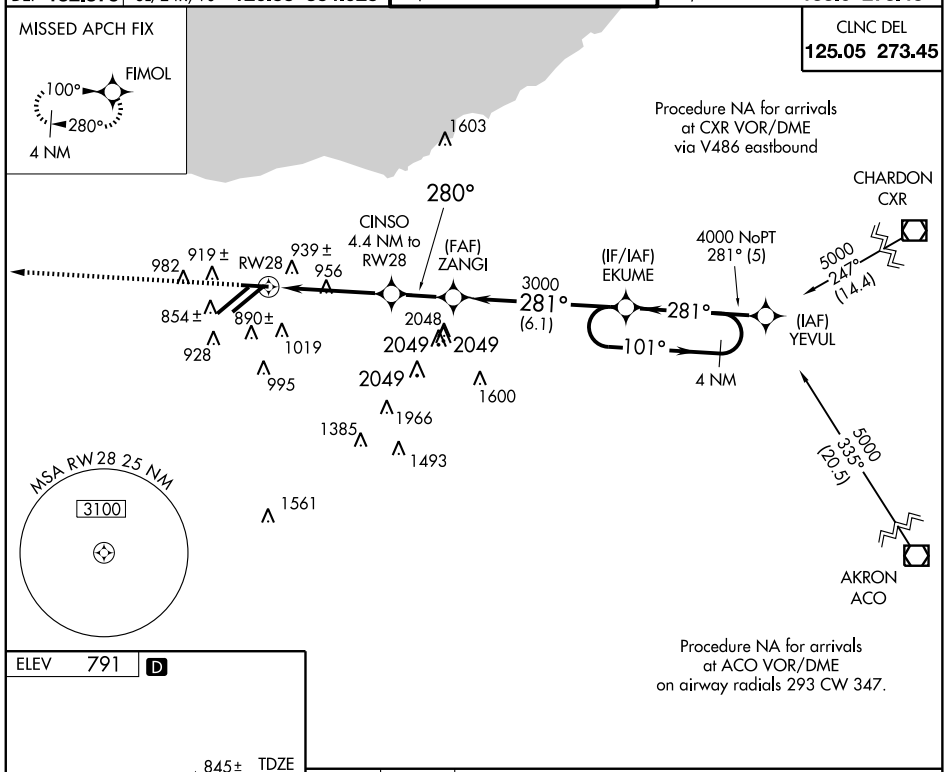
For inoperative MALSR, increase LPV all Cats visibility to RVR 5000. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA.

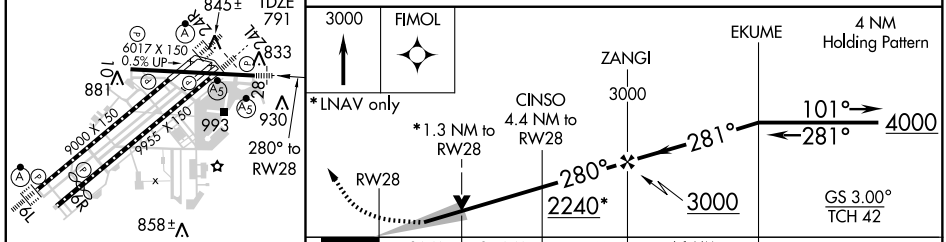
MALSR

MISSED APPROACH: Climb to 3000 direct FIMOL and hold.

ATIS	CLEVELAND APP CON	CLEVELAND TOWER	GND CON
ARR 127.85	6R/24L, 28 124.0 354.025	6R/24L, 10/28 120.9 273.45	6R/24L, 10/28 121.7 273.45
DEP 132.375	6L/24R, 10 126.55 354.025	6L/24R 124.5 273.45	6L/24R 133.6 273.45

CLNC DEL 125.05 273.45





CATEGORY		A	B	C	D
LPV	DA	1068/24	277 (300-½)		
LNAV/VNAV	DA	1247/50	456 (500-1)		
LNAV MDA		1260/24 469 (500-½)		1260/40 469 (500-¾)	1260/50 469 (500-1)

TDZ/CL Rwy 6R, 6L, and 24R
REIL Rwy 28
HIRL Rwys 10-28, 6R-24L, and 6L-24R

SANDUSKY TWO DEPARTURE

(SKY2.SKY) 09183

SL-84 (FAA)

CLEVELAND-HOPKINS INTL (CLE)
CLEVELAND, OHIO

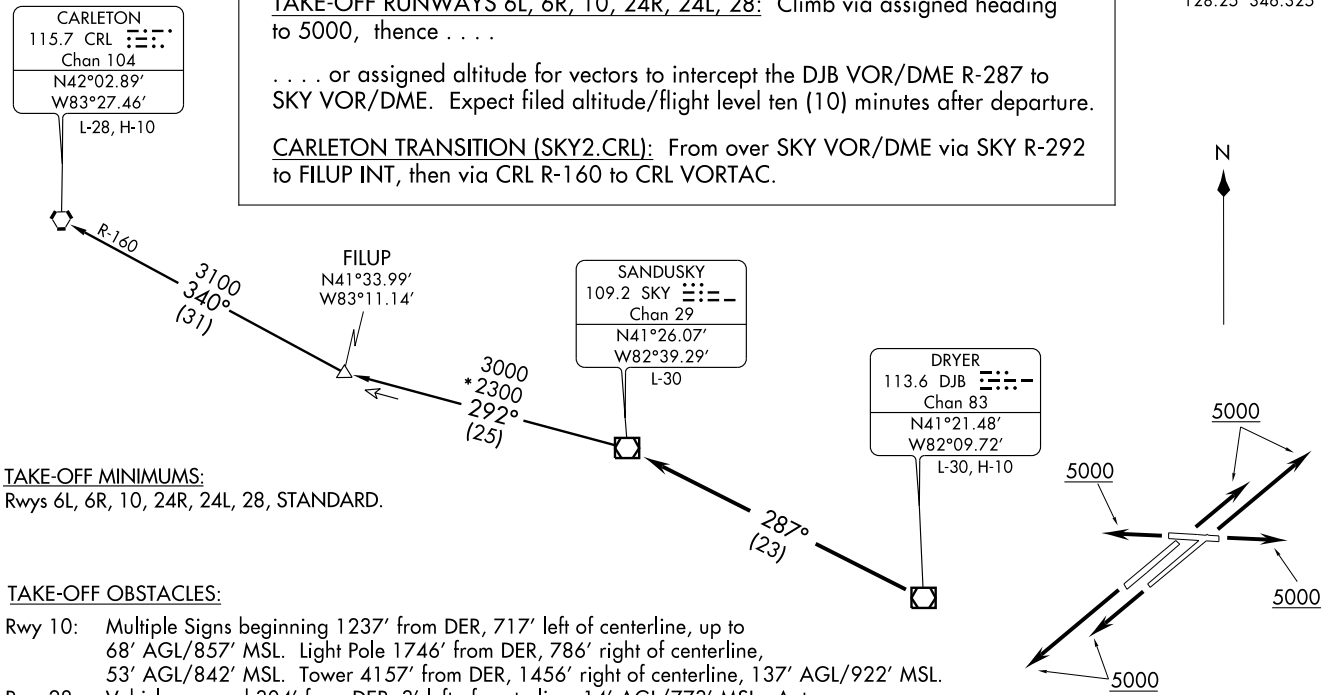
ATIS DEP 132.375
CLEVELAND DEP CON
128.25 346.325

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 6L, 6R, 10, 24R, 24L, 28: Climb via assigned heading to 5000, thence . . . .

. . . . or assigned altitude for vectors to intercept the DJB VOR/DME R-287 to SKY VOR/DME. Expect filed altitude/flight level ten (10) minutes after departure.

CARLETON TRANSITION (SKY2.CRL): From over SKY VOR/DME via SKY R-292 to FILUP INT, then via CRL R-160 to CRL VORTAC.



TAKE-OFF MINIMUMS:
Rwys 6L, 6R, 10, 24R, 24L, 28, STANDARD.

TAKE-OFF OBSTACLES:

Rwy 10: Multiple Signs beginning 1237′ from DER, 717′ left of centerline, up to 68′ AGL/857′ MSL. Light Pole 1746′ from DER, 786′ right of centerline, 53′ AGL/842′ MSL. Tower 4157′ from DER, 1456′ right of centerline, 137′ AGL/922′ MSL.

Rwy 28: Vehicle on road 304′ from DER, 3′ left of centerline, 14′ AGL/773′ MSL. Antenna on building 308′ from DER, 240′ left of centerline, 13′ AGL/775′ MSL. Multiple Trees beginning 1046′ from DER, 105′ left of centerline, up to 60′ AGL/819′ MSL. Tower 2640′ from DER, 946′ right of centerline, 80′ AGL/840′ MSL.

Rwy 24R: Tower 2565′ from DER, 1028′ right of centerline, 191′ AGL/870′ MSL. Multiple Trees beginning 3653′ from DER, 857′ left of centerline, up to 103′ AGL/870′ MSL.

Rwy 24L: Multiple Trees and Poles beginning 1903′ from DER, 5′ left of centerline, up to 89′ AGL/849′ MSL.

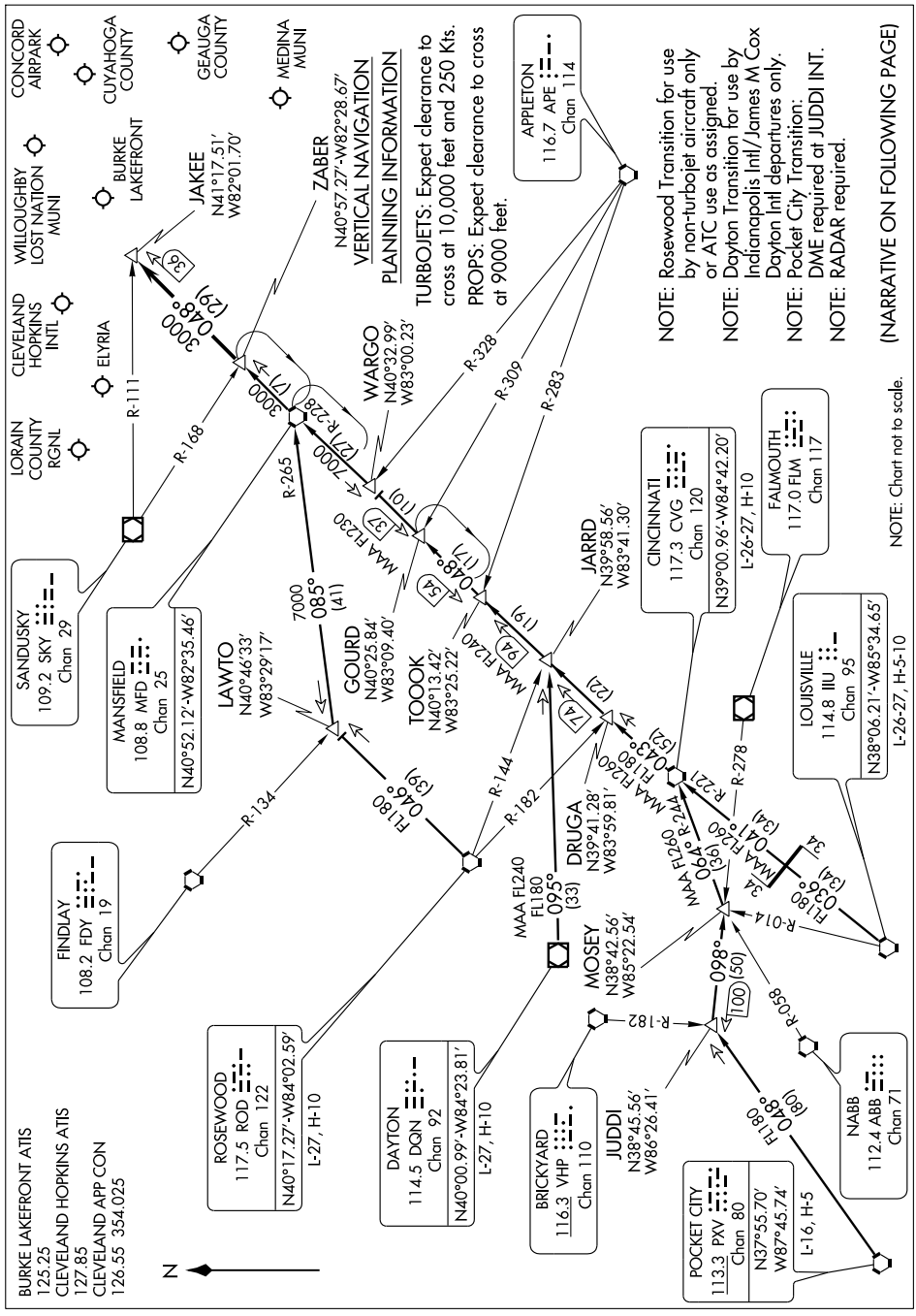
NOTE: RADAR required
NOTE: Turboprop aircraft only

NOTE: Chart not to scale.

ZABER ONE ARRIVAL

ST-84 (FAA)

CLEVELAND, OHIO



ARRIVAL ROUTE DESCRIPTION

CINCINNATI TRANSITION (CVG.ZABER1): From over CVG VORTAC via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

DAYTON TRANSITION (DQN.ZABER1): (For use by INDIANAPOLIS INTL/JAMES M COX DAYTON INTL departures only). From over DQN VOR/DME via DQN R-095 to JARRD INT, then via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

LOUISVILLE TRANSITION (IIU.ZABER1): From over IIU VORTAC via IIU R-036 and CVG R-221 to CVG VORTAC, then via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

POCKET CITY TRANSITION (PXV.ZABER1): (DME REQUIRED at JUDDI INT) From over PXV VORTAC via PXV R-048 to JUDDI INT, then via FLM R-278 to MOSEY INT, then via CVG R-244 to CVG VORTAC, then via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

ROSEWOOD TRANSITION (ROD.ZABER1): (For use by non-turbo aircraft only or ATC use as assigned). From over ROD VORTAC via ROD R-046 to LAWTO INT, then via MFD R-265 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

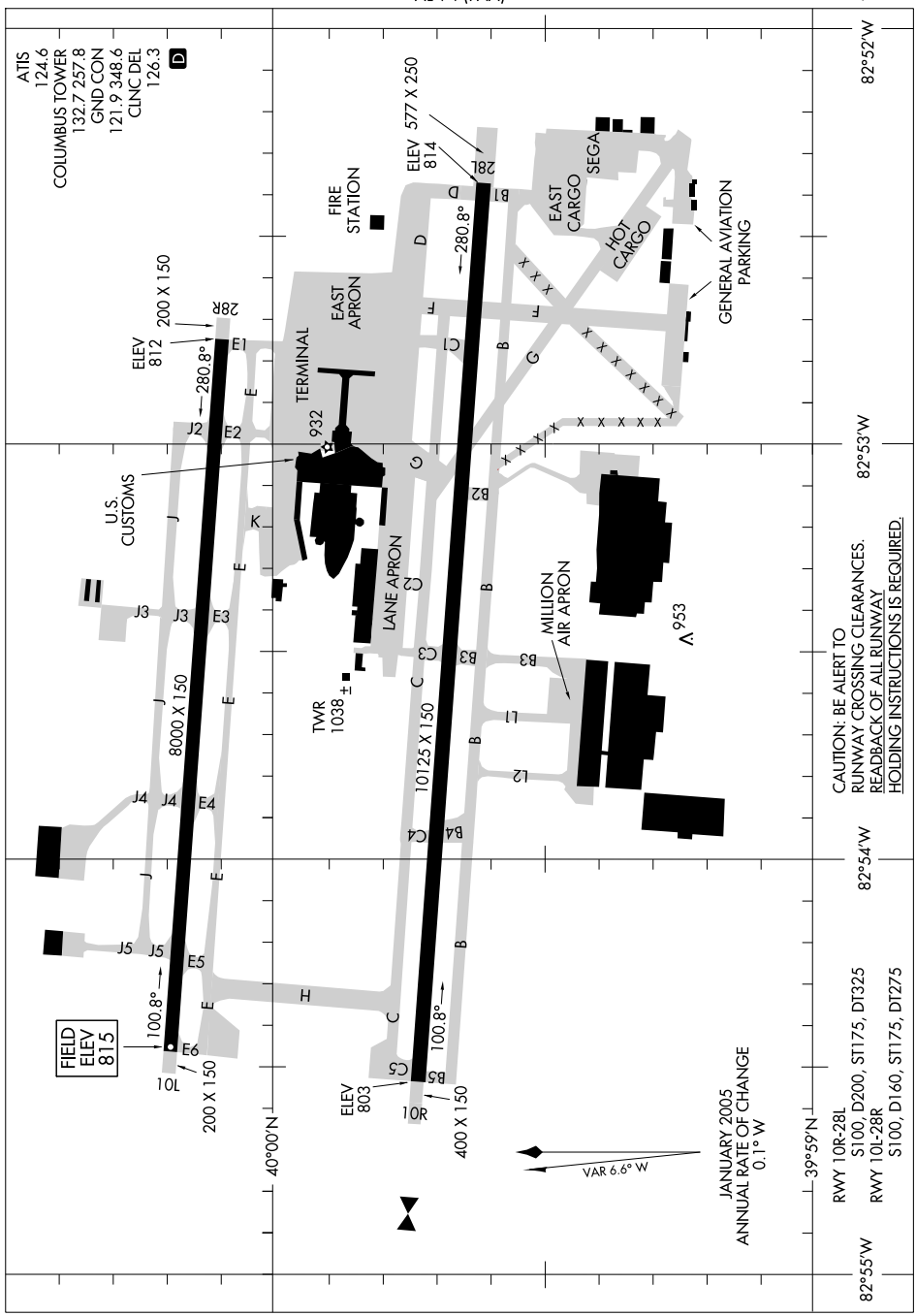
. . . . From over ZABER INT via MFD R-048 to JAKEE INT. Expect radar vectors to final approach course.

EC-2, 14 JAN 2010 to 11 FEB 2010

AIRPORT DIAGRAM

AL-94 (FAA)

COLUMBUS/ PORT COLUMBUS INTL (CMH)
COLUMBUS, OHIO

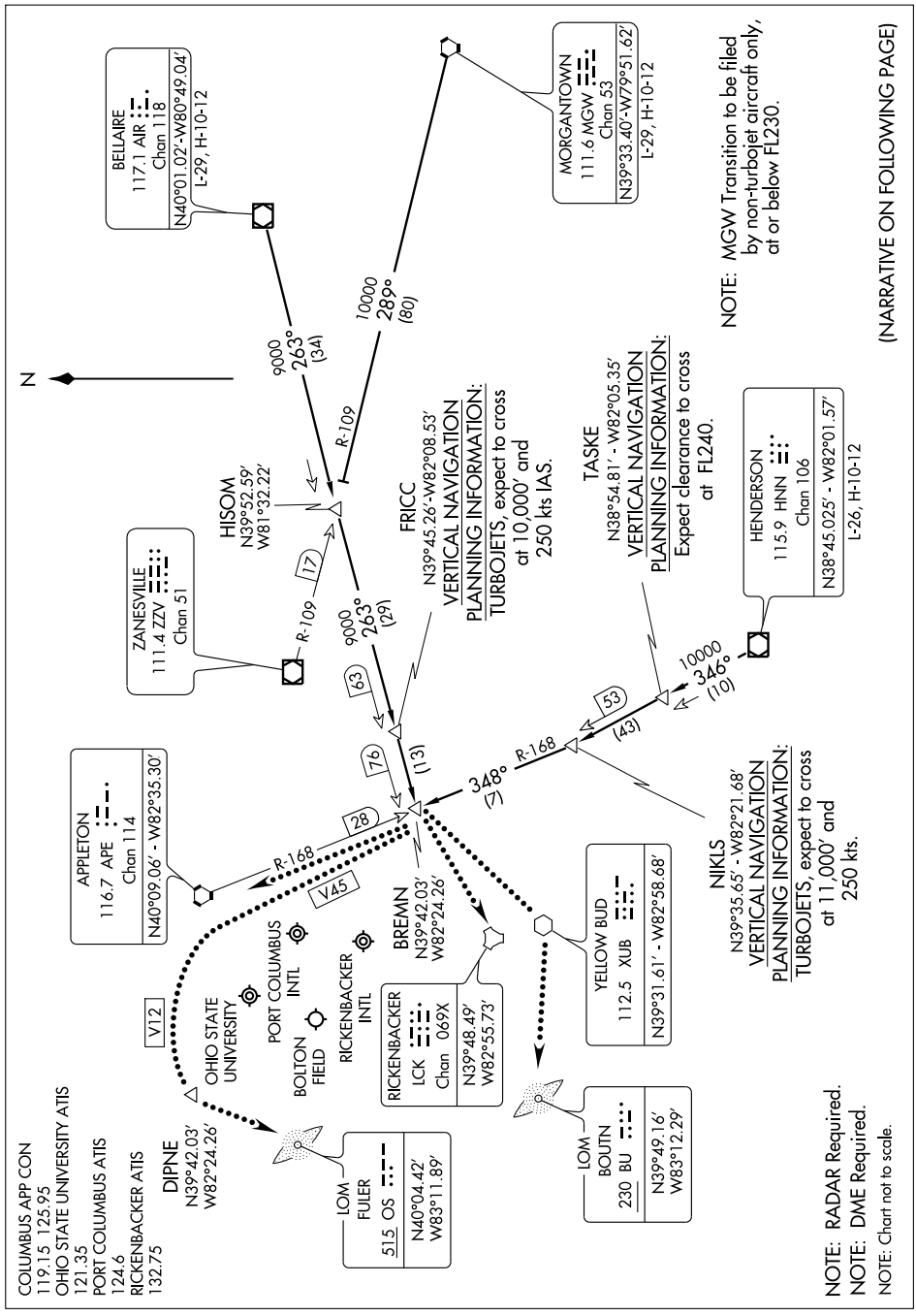


(BREMN.BREMN3) 08269

BREMN THREE ARRIVAL

ST-94 (FAA)

COLUMBUS, OHIO



ARRIVAL ROUTE DESCRIPTION

BELLAIRE TRANSITION (AIR.BREMN3): From over AIR VOR/DME via AIR R-263 to BREMN INT. Thence. . . .
HENDERSON TRANSITION (HNN.BREMN3): From over HNN VOR/DME via HNN R-346 to NIKLS INT, then via APE R-168 to BREMN INT. Thence. . . .
MORGANTOWN TRANSITION (MGW.BREMN3): From over MGW VORTAC via MGW R-289 and ZZV R-109 to HISOM, then via AIR R-263 to BREMN. Thence. . . .

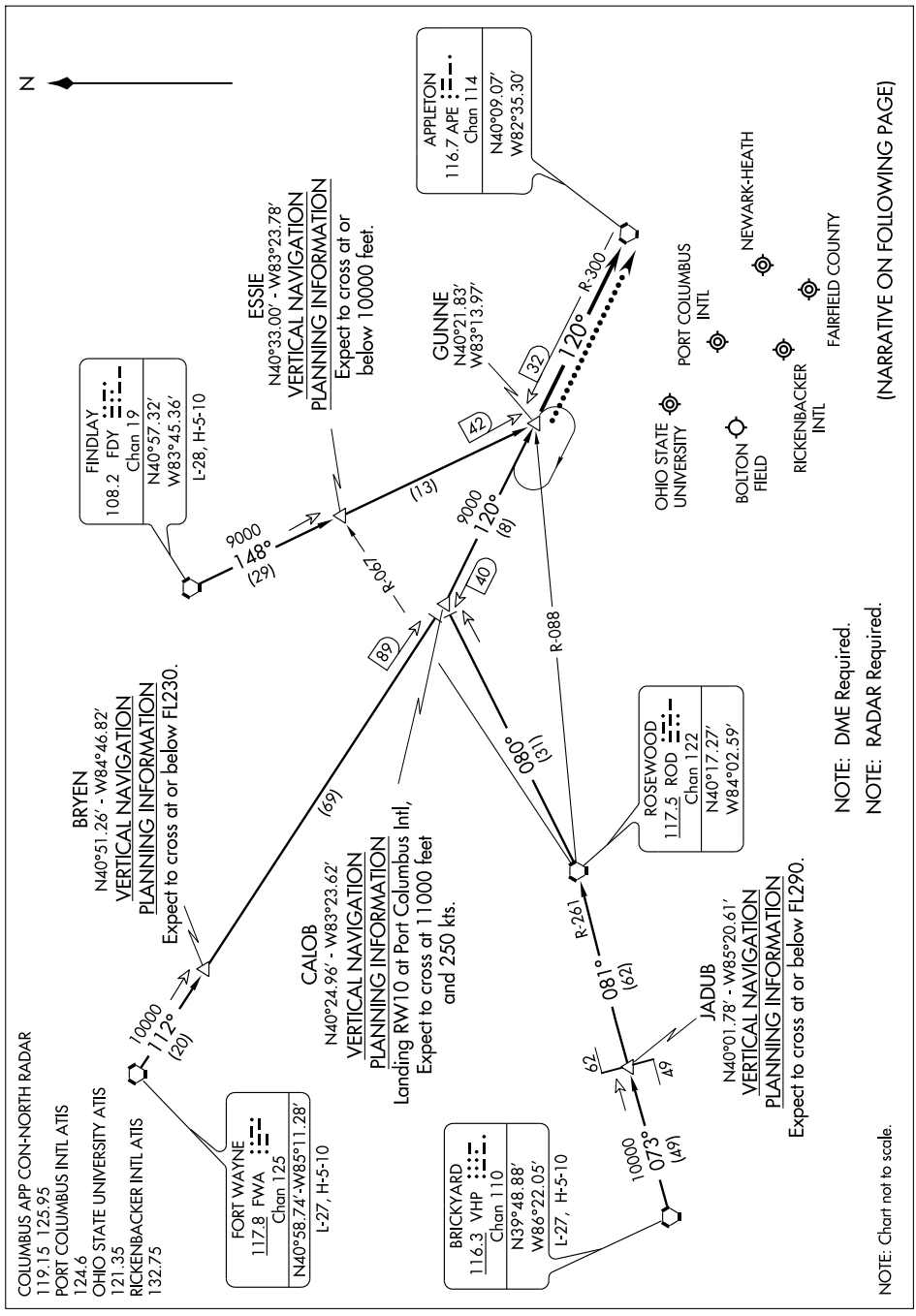
. . . . From over BREMN DME expect radar vectors to final approach course.

LOST COMMUNICATION PROCEDURE:
LANDING PORT COLUMBUS INTL: From BREMN INT direct APE VORTAC, maintain 3000 until APE VORTAC.
LANDING OHIO STATE UNIVERSITY: From BREMN INT via V45 to APE VORTAC then via V12 to DIPNE INT then direct FULER (OS) LOM, maintain 3000 until FULER (OS) LOM.
LANDING RICKENBACKER INTL: From BREMN INT direct LCK TACAN, maintain 3000 until LCK TACAN.
LANDING BOLTON FIELD: From BREMN INT to XUB VOR direct BOUTN (BU) LOM, Maintain 3000 until BOUTN (BU) LOM.

EC-2, 14 JAN 2010 to 11 FEB 2010

GUNNE ONE ARRIVAL

COLUMBUS, OHIO



GUNNE ONE ARRIVAL

ARRIVAL ROUTE DESCRIPTION

BRICKYARD TRANSITION (VHP.GUNNE1): From over VHP VORTAC via VHP R-073 to JADUB INT, then via ROD R-261 to ROD VORTAC, then via ROD R-080 to CALOB INT, then via APE R-300 to GUNNE INT. Thence. . . .

FINDLEY TRANSITION (FDY.GUNNE1): From over FDY VORTAC via FDY R-148 to GUNNE INT. Thence. . . .

FORT WAYNE TRANSITION (FWA.GUNNE1): From over FWA VORTAC via FWA R-112 to CALOB INT, then via APE R-300 to GUNNE INT. Thence. . . .

. . . .From over GUNNE via heading 120°. Expect radar vectors to final approach course.

LOST COMMUNICATION PROCEDURE:

For all airports - From over GUNNE INT direct APE VORTAC, maintain 4000 and hold.

LOC/DME I-CBP	APP CRS	Rwy ldg	8000
109.1	099°	TDZE	815
Chan 28		Apt Elev	815

ILS or LOC RWY 10L

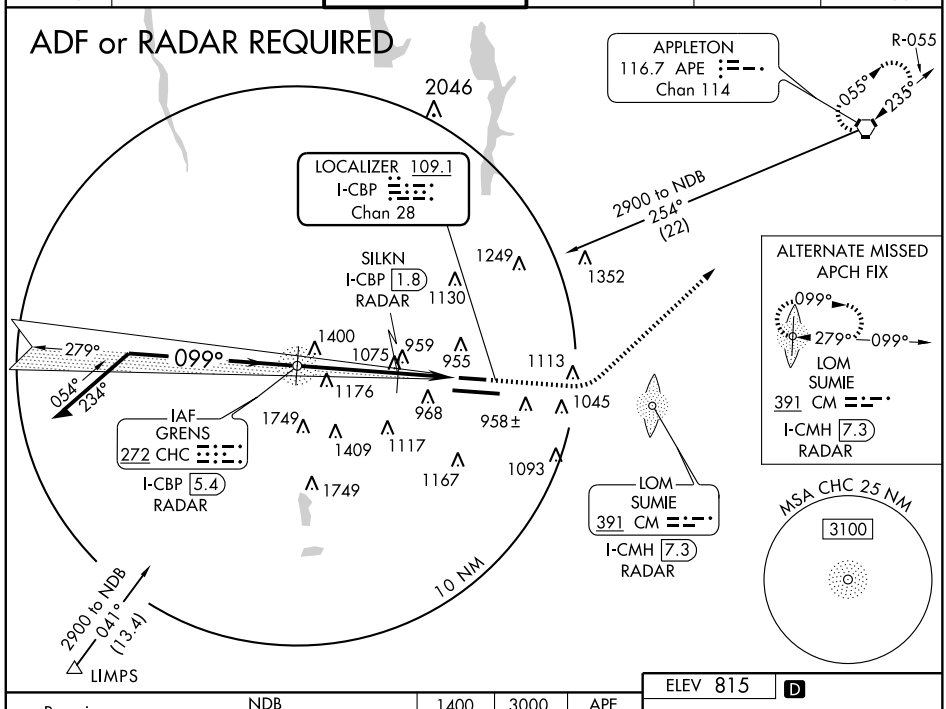
COLUMBUS / PORT COLUMBUS INTL (CMH)

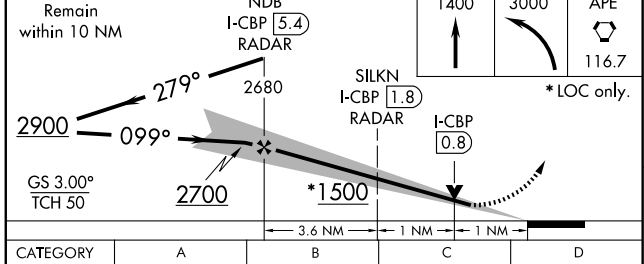
ADF or RADAR REQUIRED
**RVR 1800 authorized with the use of FD or AP or HUD to DA.

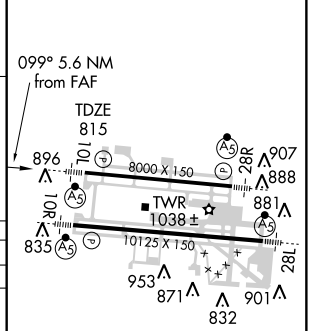
MALSR

MISSED APPROACH: Climb to 1400 then climbing left turn to 3000 direct APE VORTAC and hold.

ATIS	COLUMBUS APP CON	COLUMBUS TOWER	GND CON	CLNC DEL	UNICOM
124.6	125.95 371.975	132.7 257.8	121.9 348.6	126.3	122.95







CATEGORY	A	B	C	D
S-ILS 10L	**1015/24 200 (200-½)			
S-LOC 10L	1500/24 685 (700-½)		1500-1½ 685 (700-1½)	1500-1¾ 685 (700-1¾)
CIRCLING	1500-1 685 (700-1)		1500-2 685 (700-2)	1500-2¼ 685 (700-2¼)
SILKN FIX MINIMUMS				
S-LOC 10L	1180/24 365 (400-½)			1180/40 365 (400-¾)
CIRCLING	1340-1 525 (600-1)		1340-1½ 525 (600-1½)	1380-2 565 (600-2)

HIRL Rwys 10R-28L and 10L-28R

FAF to MAP 5.6 NM					
Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52

EC-2. 14 JAN 2010 to 11 FEB 2010

LOC/DME I-AQI	APP CRS	Rwy ldg	10125
108.7	099°	TDZE	810
Chan 24		Apt Elev	815

ILS or LOC RWY 10R

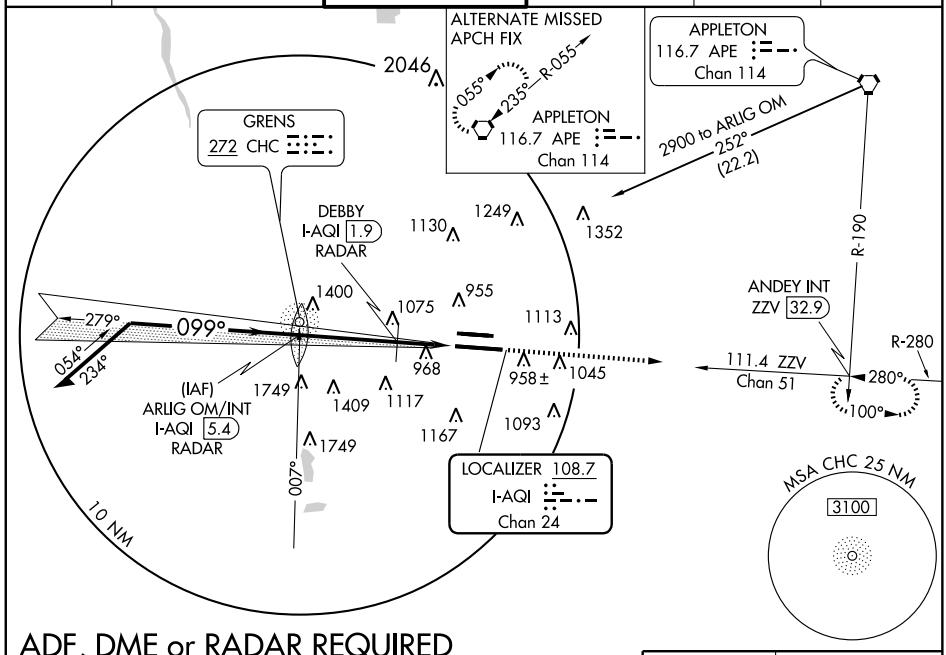
COLUMBUS / PORT COLUMBUS INTL (CMH)

If local altimeter not received, use Rickenbacker Intl altimeter setting and increase all DAs and MDAs 40 feet.
** RVR 1800 authorized with the use of FD or AP or HUD to DA.

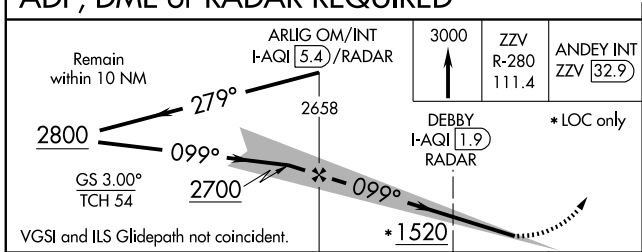
MALSR

MISSED APPROACH: Climb to 3000 via ZZV R-280 to ANDEY Int/ZZV 32.9 DME and hold.

ATIS	COLUMBUS APP CON	COLUMBUS TOWER	GND CON	CLNC DEL	UNICOM
124.6	125.95 371.975	132.7 257.8	121.9 348.6	126.3	122.95

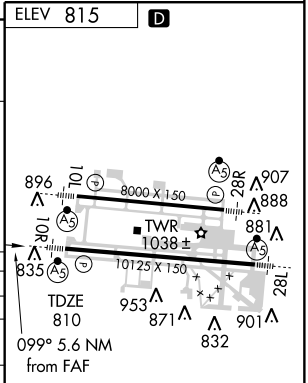


ADF, DME or RADAR REQUIRED



CATEGORY	A	B	C	D
S-ILS 10R	**1010/24 200 (200-½)			
S-LOC 10R	1520/24 710 (800-½)		1520-1½ 710 (800-1½)	1520-1¾ 710 (800-1¾)
CIRCLING	1520-1 705 (800-1)		1520-2 705 (800-2)	1520-2¼ 705 (800-2¼)
DEBBY FIX MINIMUMS				
S-LOC 10R	1220/24 410 (500-½)		1220/40 410 (500-¾)	
CIRCLING	1340-1 525 (600-1)		1340-1½ 525 (600-1½)	1380-2 565 (600-2)

ELEV 815 D



HIRL Rwys 10R-28L and 10L-28R

FAF to MAP 5.6 NM					
Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52

EC-2. 14 JAN 2010 to 11 FEB 2010

COLUMBUS, OHIO

AL-94 (FAA)

LOC/DME I-CMH	APP CRS	Rwy ldg	10125
108.7	279°	TDZE	813
Chan 24		Apt Elev	815

ILS or LOC RWY 28L

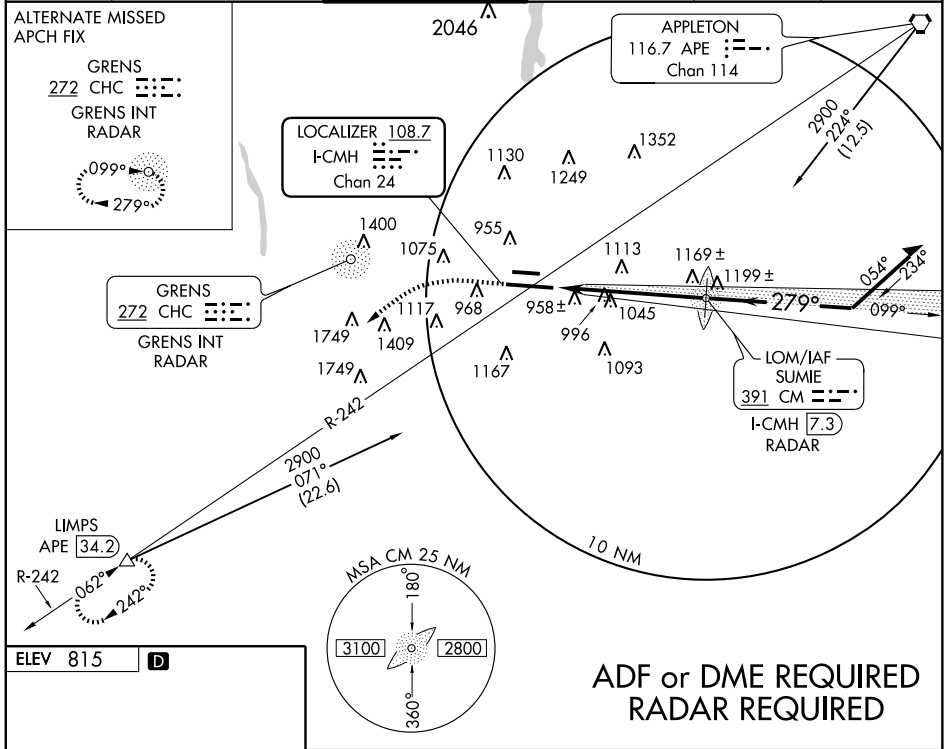
COLUMBUS / PORT COLUMBUS INTL (CMH)

**RVR 1800 authorized with the use of FD or AP or HUD to DA.

MALSR

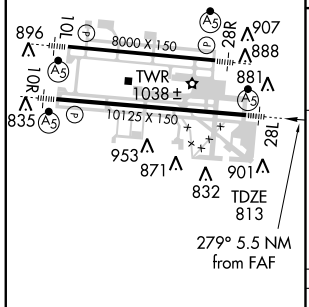
MISSED APPROACH: Climb to 1400 then climbing left turn to 3000 via heading 210° and APE R-242 to LIMPS Int/34.2 DME and hold.

ATIS	COLUMBUS APP CON	COLUMBUS TOWER	GND CON	CLNC DEL	UNICOM
124.6	125.95 371.975	132.7 257.8	121.9 348.6	126.3	122.95



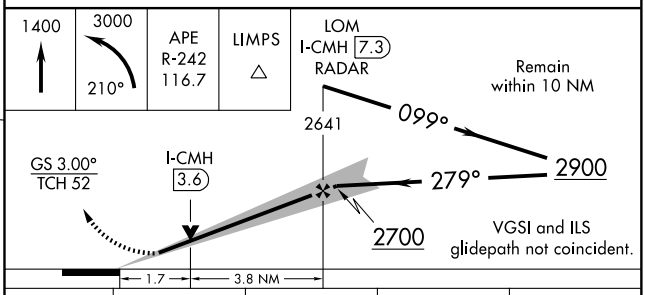
ADF or DME REQUIRED
RADAR REQUIRED

ELEV 815 D



HIRL Rwys 10R-28L and 10L-28R

FAF to MAP 5.5 NM					
Knots	60	90	120	150	180
Min:Sec	5:30	3:40	2:45	2:12	1:50



CATEGORY	A	B	C	D
S-ILS 28L	**1013/24 200 (200-½)			
S-LOC 28L	1420/24 607 (700-½)		1420/60 607 (700-1¼)	1420-1½ 607 (700-1½)
CIRCLING	1420-1 605 (700-1)		1420-1¾ 605 (700-1¾)	1420-2 605 (700-2)

EC-2, 14 JAN 2010 to 11 FEB 2010

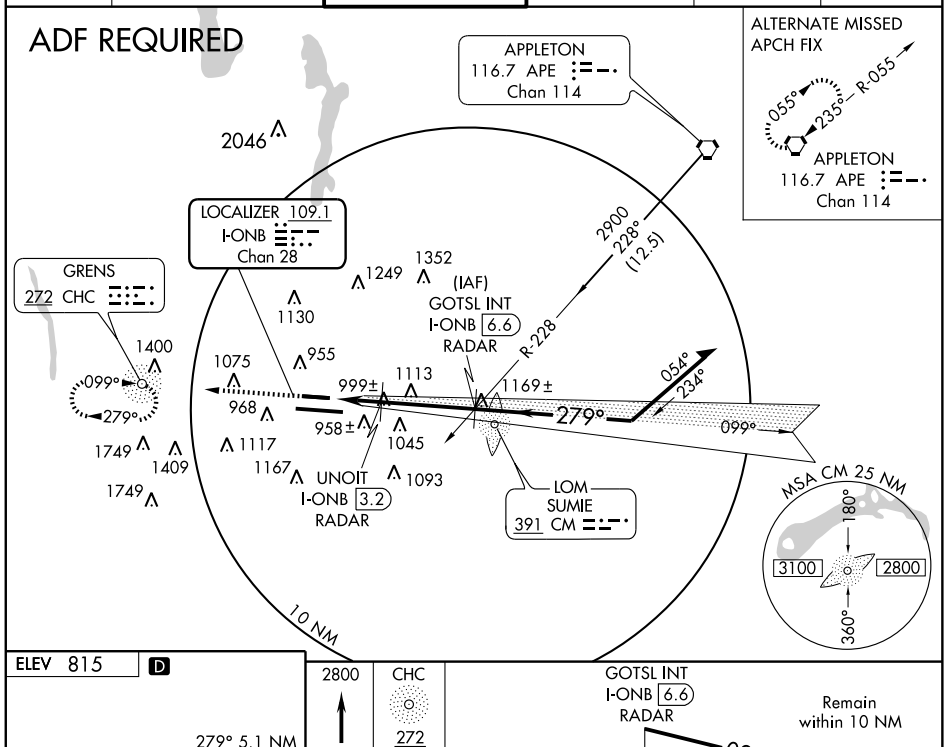
LOC/DME I-ONB 109.1 Chan 28	APP CRS 279°	Rwy ldg 8000 TDZE 813 Apt Elev 815

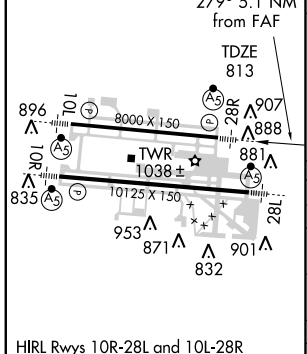
ILS or LOC RWY 28R
COLUMBUS / PORT COLUMBUS INTL (CMH)

MALSR

MISSED APPROACH: Climb to 2800 direct GRENS NDB and hold.

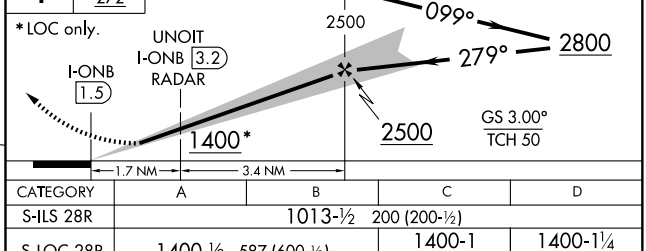
ATIS	COLUMBUS APP CON	COLUMBUS TOWER	GND CON	CLNC DEL	UNICOM
124.6	125.95 371.975	132.7 257.8	121.9 348.6	126.3	122.95





HIRL Rwys 10R-28L and 10L-28R

FAF to MAP 5.1 NM					
Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42



CATEGORY	A	B	C	D
S-ILS 28R	1013-½ 200 (200-½)			
S-LOC 28R	1400-½ 587 (600-½)		1400-1 587 (600-1)	1400-1¼ 587 (600-1¼)
CIRCLING	1400-1 585 (600-1)		1400-1½ 585 (600-1½)	1400-2 585 (600-2)
UNOIT FIX MINIMUMS				
S-LOC 28R	1260-½ 447 (500-½)		1260-¾ 447 (500-¾)	1260-1 447 (500-1)
CIRCLING	1340-1 525 (600-1)		1340-1½ 525 (600-1½)	1380-2 565 (600-2)

EC-2, 14 JAN 2010 to 11 FEB 2010

WAAS CH 40299 W10B	APP CRS 099°	Rwy ldg 8000 TDZE 815 Apt Elev 815

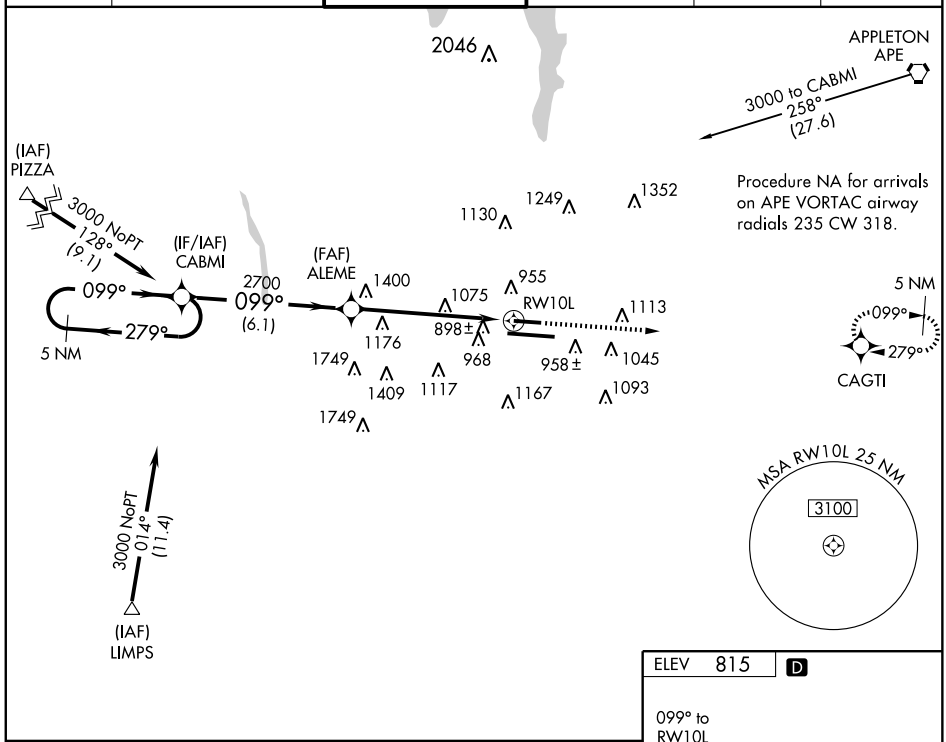
RNAV (GPS) RWY 10L
COLUMBUS / PORT COLUMBUS INTL (CMH)

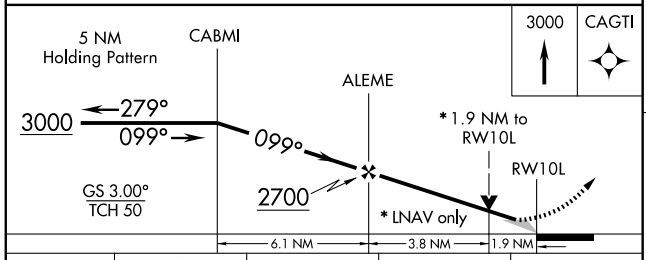
DME/DME RNP-0.3 NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). For inoperative MALSR, increase LPV visibility to RVR 5000 all Cats.

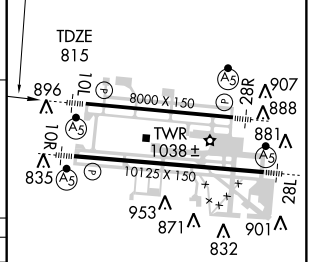
MALSR

MISSED APPROACH: Climb to 3000 direct CAGTI and hold.

ATIS	COLUMBUS APP CON	COLUMBUS TOWER	GND CON	CLNC DEL	UNICOM
124.6	125.95 371.975	132.7 257.8	121.9 348.6	126.3	122.95







CATEGORY	A	B	C	D
LPV DA	1097/24 282 (300-½)			
LNAV/VNAV DA	1264/50 449 (500-1)			
LNAV MDA	1480/24 665 (700-½)		1480/60 665 (700-1¼)	1480-1½ 665 (700-1½)
CIRCLING	1480-1 665 (700-1)		1480-1¾ 665 (700-1¾)	1480-2 665 (700-2)

HIRL Rwys 10R-28L and 10L-28R

EC-2, 14 JAN 2010 to 11 FEB 2010

WAAS CH 99603 W10A	APP CRS 099°	Rwy ldg 10125 TDZE 810 Apt Elev 815

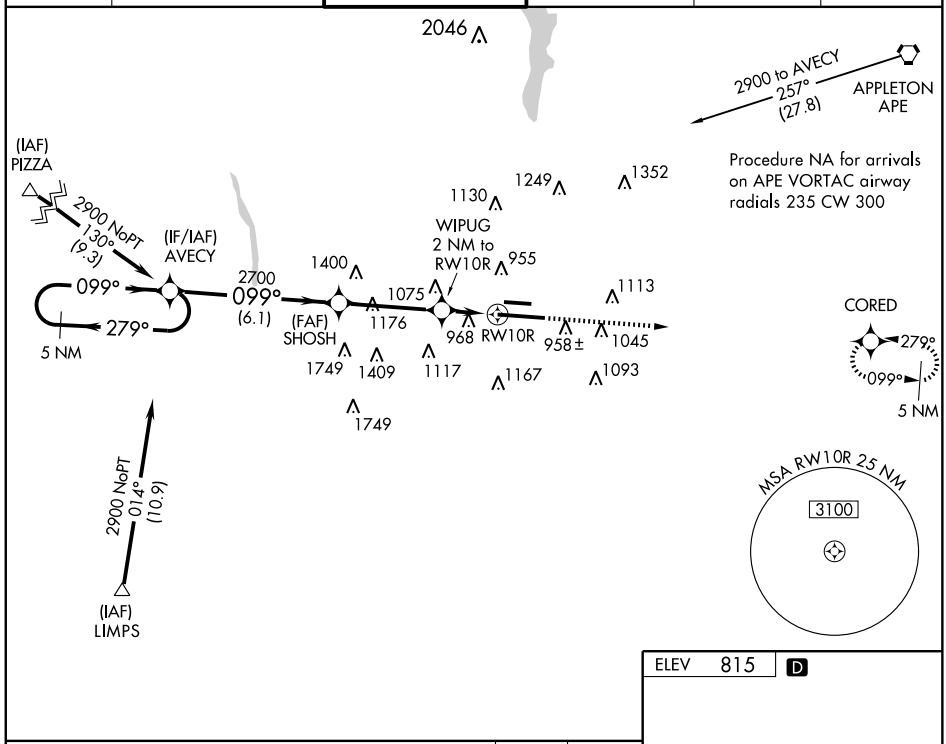
RNAV (GPS) RWY 10R
COLUMBUS / PORT COLUMBUS INTL (CMH)

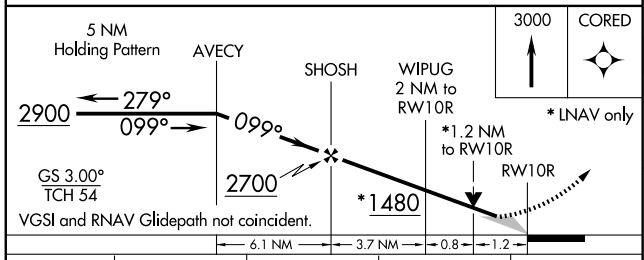
DME/DME RNP-0.3 NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). For inoperative MALSR, increase LPV visibility to 1 all Cats.

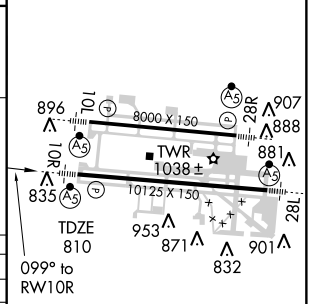
MALSR

MISSED APPROACH: Climb to 3000 direct CORED and hold.

ATIS	COLUMBUS APP CON	COLUMBUS TOWER	GND CON	CLNC DEL	UNICOM
124.6	125.95 371.975	132.7 257.8	121.9 348.6	126.3	122.95







CATEGORY	A	B	C	D
LPV DA	1078/24 268 (300-½)			
LNAV/VNAV DA	1268/50 458 (500-1)			
LNAV MDA	1240/24 430 (500-½)		1240/40 430 (500-¾)	1240/50 430 (500-1)
CIRCLING	1340-1 525 (600-1)		1340-1½ 525 (600-1½)	1380-2 565 (600-2)

HIRL Rwys 10R-28L and 10L-28R

EC-2, 14 JAN 2010 to 11 FEB 2010

WAAS CH 48999 W28A	APP CRS 279°	Rwy ldg 10125 TDZE 813 Apt Elev 815

RNAV (GPS) RWY 28L

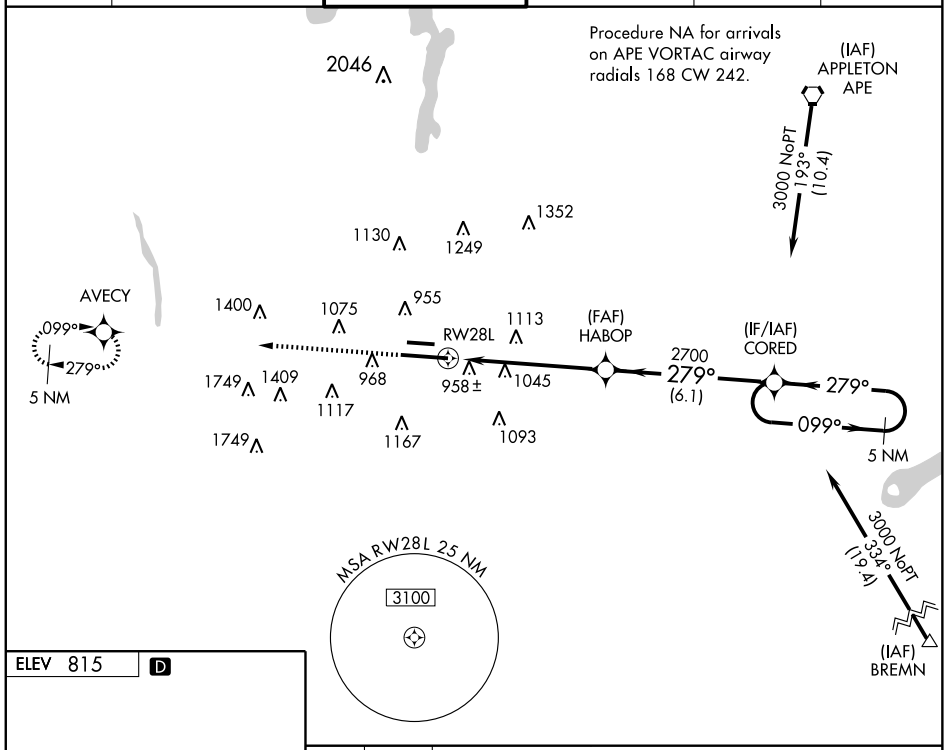
COLUMBUS / PORT COLUMBUS INTL (CMH)

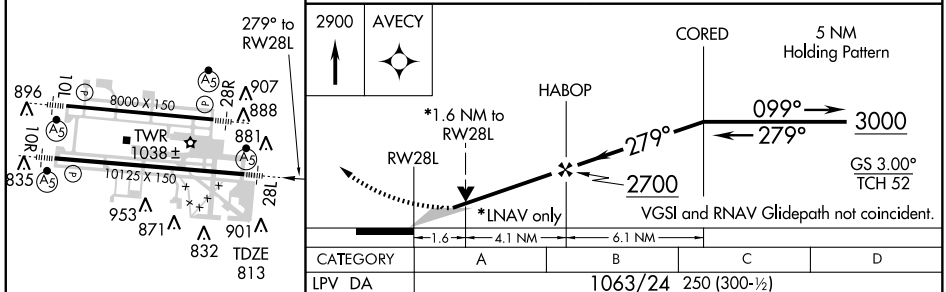
DME/DME RNP-0.3 NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F).

MALSR

MISSED APPROACH: Climb to 2900 direct AVECY and hold.

ATIS	COLUMBUS APP CON	COLUMBUS TOWER	GND CON	CLNC DEL	UNICOM
124.6	125.95 371.975	132.7 257.8	121.9 348.6	126.3	122.95





CATEGORY	A	B	C	D
LPV DA	1063/24 250 (300-½)			
LNAV/VNAV DA	1341/60 528 (600-1¼)			
LNAV MDA	1380/24 567 (600-½)		1380/50 567 (600-1)	1380/60 567 (600-1¼)
CIRCLING	1380-1 565 (600-1)		1380-1½ 565 (600-1½)	1380-2 565 (600-2)

HIRL Rwys 10R-28L and 10L-28R

APP CRS	Rwy ldg	8000
279°	TDZE	813
	Apt Elev	815

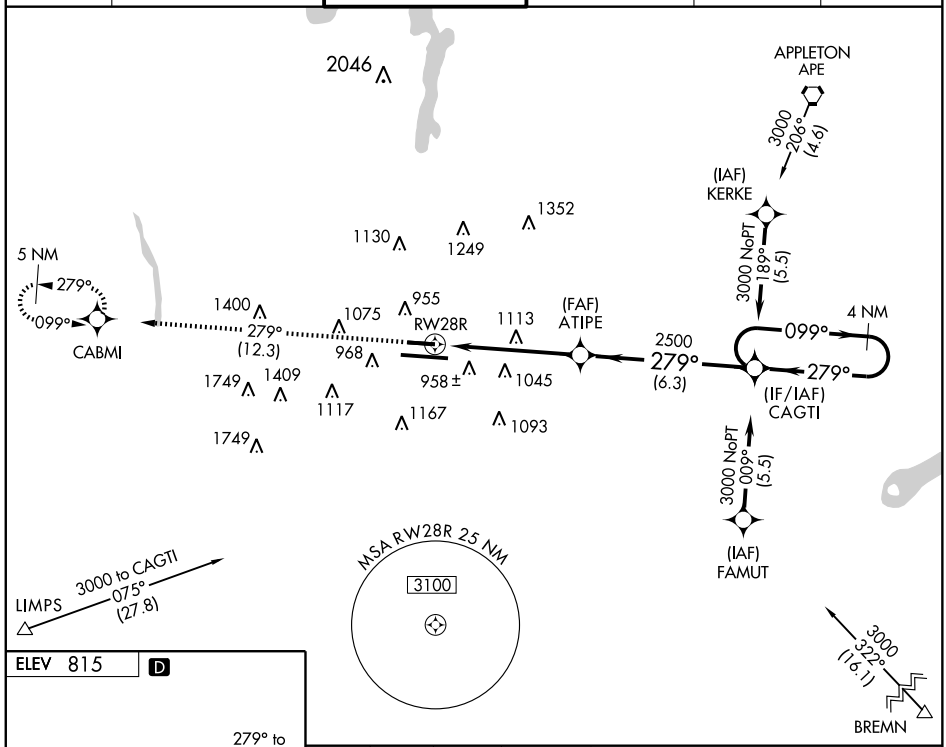
RNAV (GPS) RWY 28R
COLUMBUS / PORT COLUMBUS INTL (CMH)

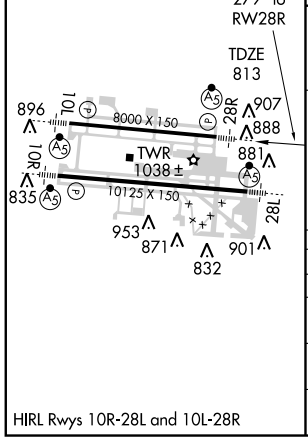
Baro-VNAV NA below -17°C (2°F).
GPS or RNP-0.3 required.
DME/DME RNP-0.3 NA.

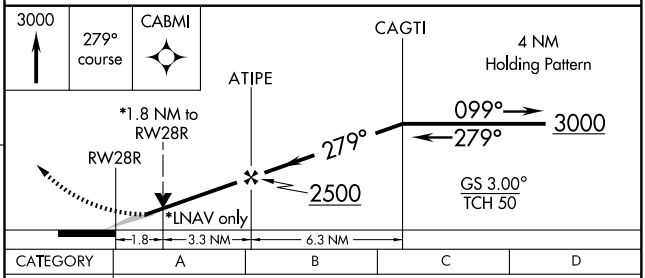
MALSR

MISSED APPROACH: Climb to 3000 via course 279° to CABMI WP and hold.

ATIS	COLUMBUS APP CON	COLUMBUS TOWER	GND CON	CLNC DEL	UNICOM
124.6	125.95 371.975	132.7 257.8	121.9 348.6	126.3	122.95







CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/VNAV DA	1160- ¾ 347 (400- ¾)			
LNAV MDA	1420- ¾ 607 (700- ¾)		1420-1¼ 607 (700-1¼)	1420-1½ 607 (700-1½)
CIRCLING	1420-1¼ 605 (700-1¼)		1420-1¾ 605 (700-1¾)	1420-2 605 (700-2)

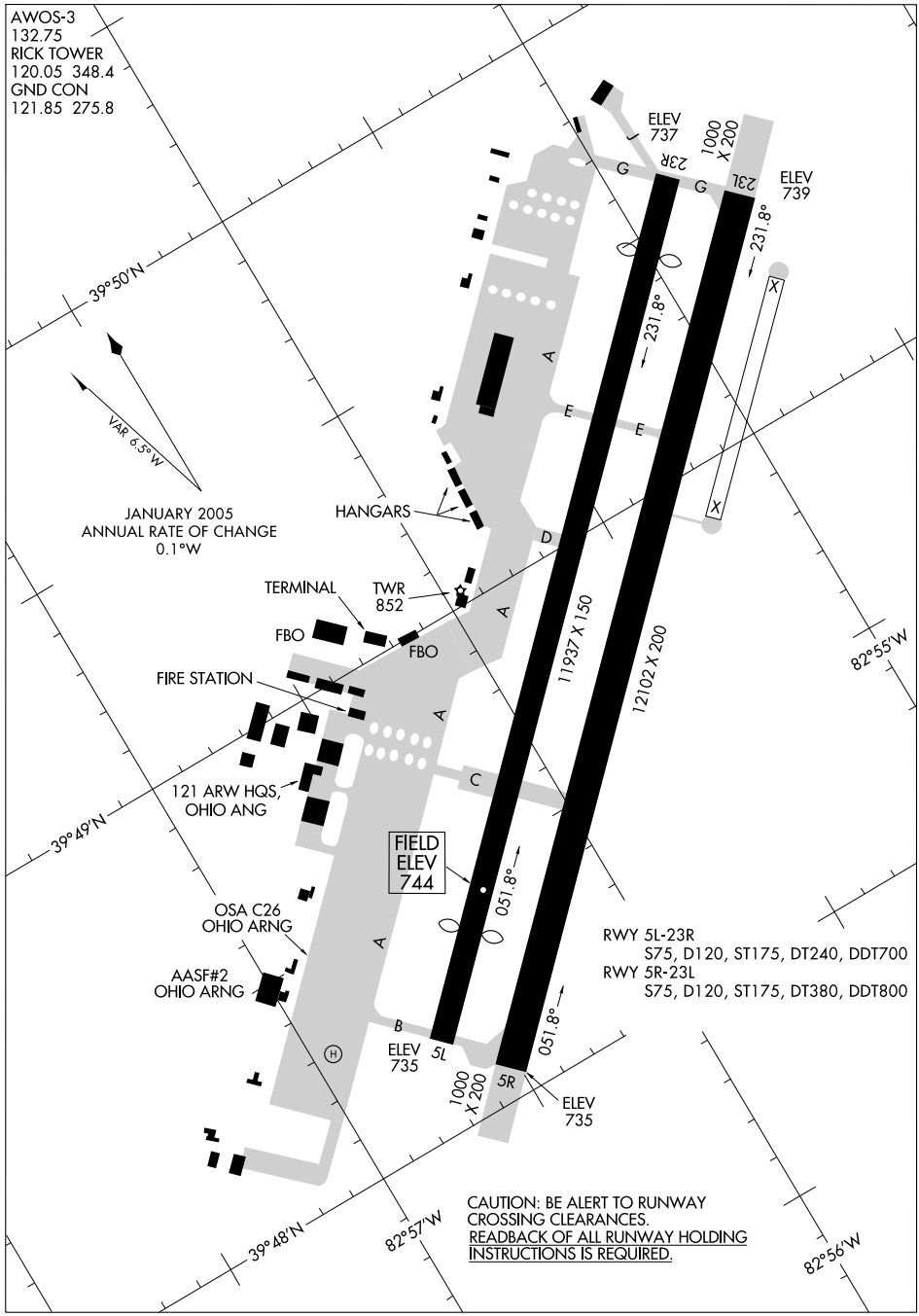
HIRL Rwys 10R-28L and 10L-28R

EC-2, 14 JAN 2010 to 11 FEB 2010

AIRPORT DIAGRAM

AL-6846 (FAA)

COLUMBUS/ RICKENBACKER INTL (LCK)
COLUMBUS, OHIO

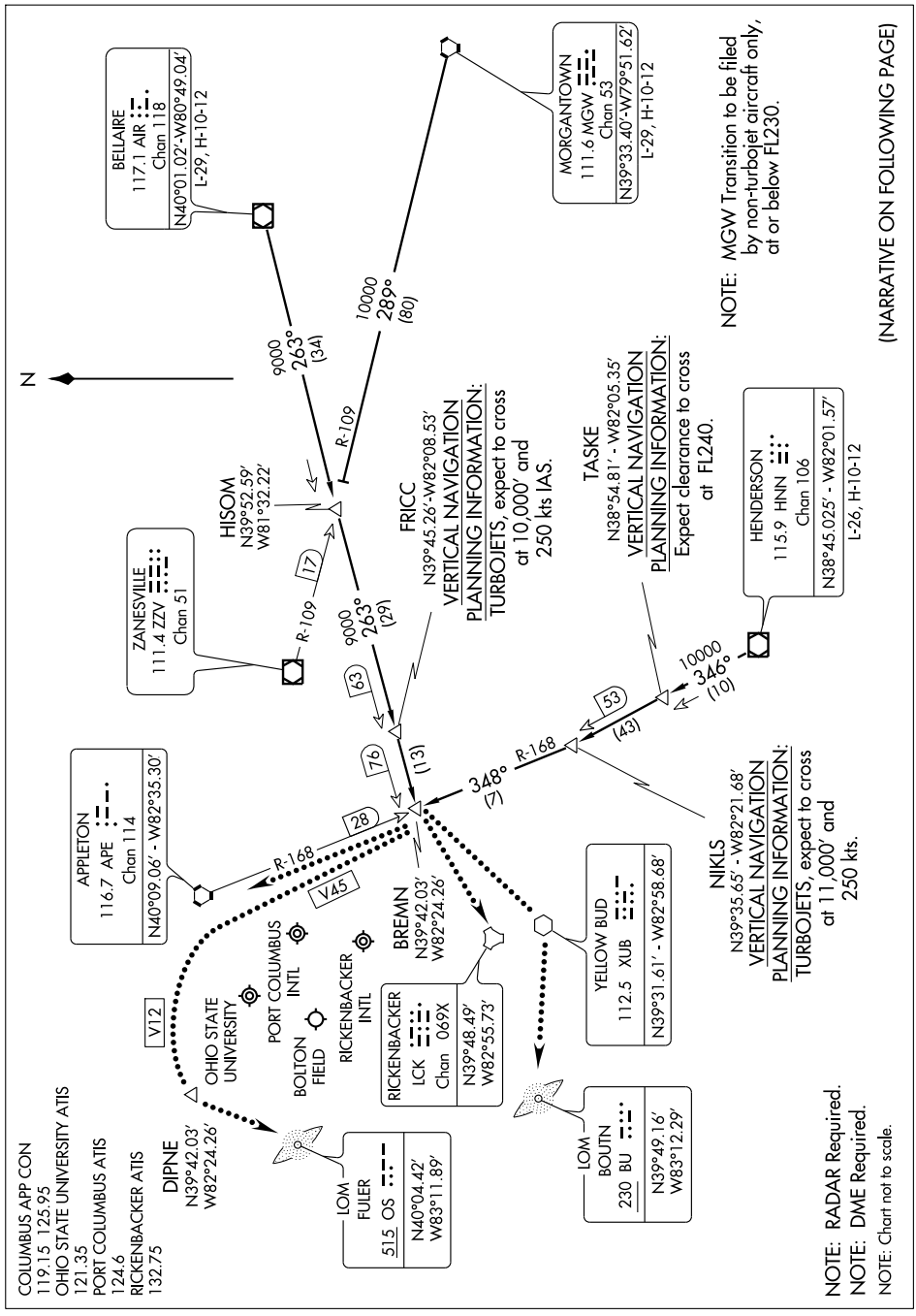


(BREMN.BREMN3) 08269

BREMN THREE ARRIVAL

ST-94 (FAA)

COLUMBUS, OHIO



ARRIVAL ROUTE DESCRIPTION

BELLAIRE TRANSITION (AIR.BREMN3): From over AIR VOR/DME via AIR R-263 to BREMN INT. Thence. . . .
HENDERSON TRANSITION (HNN.BREMN3): From over HNN VOR/DME via HNN R-346 to NIKLS INT, then via APE R-168 to BREMN INT. Thence. . . .
MORGANTOWN TRANSITION (MGW.BREMN3): From over MGW VORTAC via MGW R-289 and ZZV R-109 to HISOM, then via AIR R-263 to BREMN. Thence. . . .

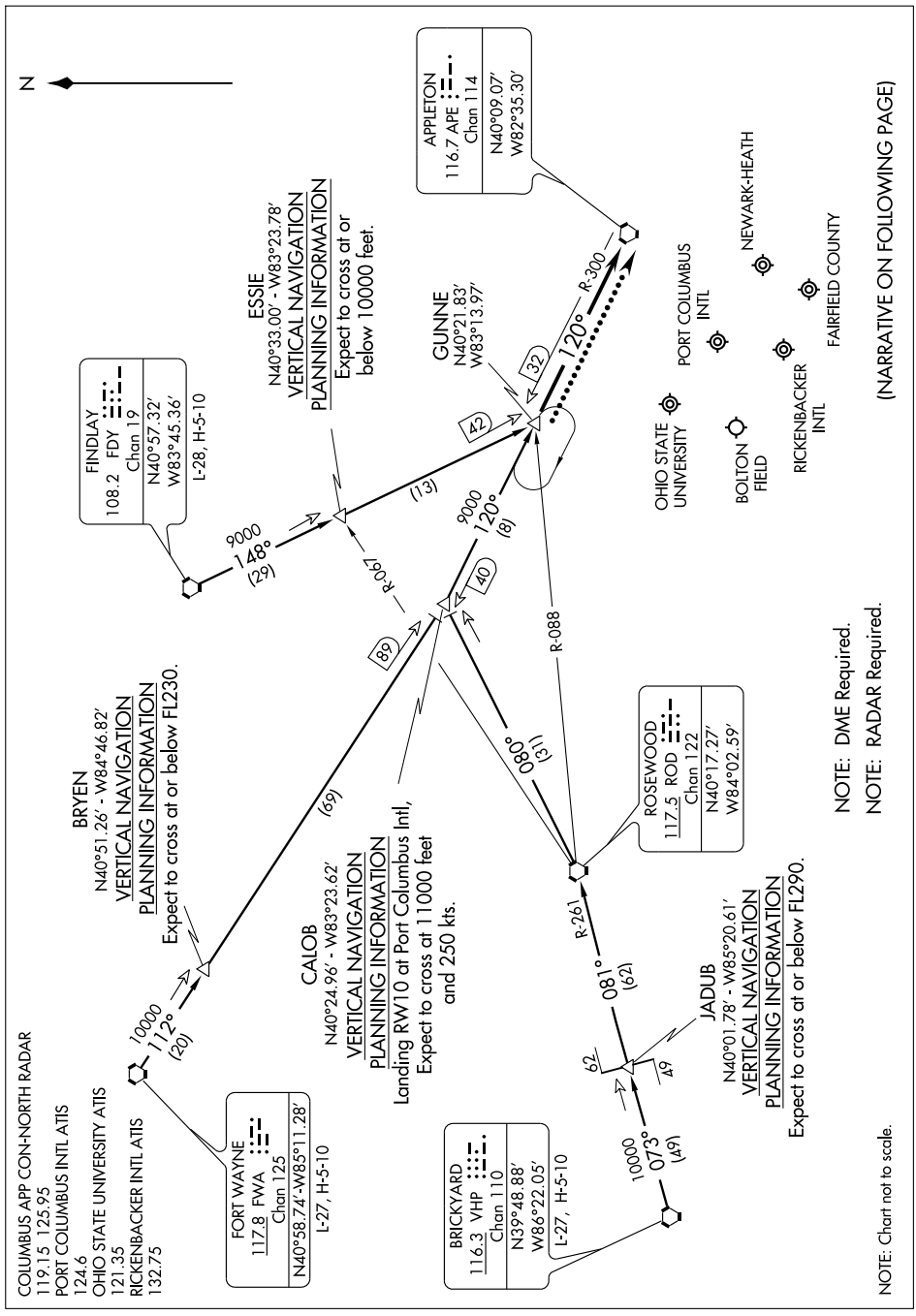
. . . . From over BREMN DME expect radar vectors to final approach course.

LOST COMMUNICATION PROCEDURE:
LANDING PORT COLUMBUS INTL: From BREMN INT direct APE VORTAC, maintain 3000 until APE VORTAC.
LANDING OHIO STATE UNIVERSITY: From BREMN INT via V45 to APE VORTAC then via V12 to DIPNE INT then direct FULER (OS) LOM, maintain 3000 until FULER (OS) LOM.
LANDING RICKENBACKER INTL: From BREMN INT direct LCK TACAN, maintain 3000 until LCK TACAN.
LANDING BOLTON FIELD: From BREMN INT to XUB VOR direct BOUTN (BU) LOM, Maintain 3000 until BOUTN (BU) LOM.

EC-2, 14 JAN 2010 to 11 FEB 2010

GUNNE ONE ARRIVAL

COLUMBUS, OHIO



GUNNE ONE ARRIVAL

ARRIVAL ROUTE DESCRIPTION

BRICKYARD TRANSITION (VHP.GUNNE1): From over VHP VORTAC via VHP R-073 to JADUB INT, then via ROD R-261 to ROD VORTAC, then via ROD R-080 to CALOB INT, then via APE R-300 to GUNNE INT. Thence. . . .

FINDLEY TRANSITION (FDY.GUNNE1): From over FDY VORTAC via FDY R-148 to GUNNE INT. Thence. . . .

FORT WAYNE TRANSITION (FWA.GUNNE1): From over FWA VORTAC via FWA R-112 to CALOB INT, then via APE R-300 to GUNNE INT. Thence. . . .

. . . .From over GUNNE via heading 120°. Expect radar vectors to final approach course.

LOST COMMUNICATION PROCEDURE:

For all airports - From over GUNNE INT direct APE VORTAC, maintain 4000 and hold.

HI-ILS or LOC/DME RWY 5R

LOC I-DDV 110.1 Chan 38	APCH CRS 050°	Rwy ldg 12,102 TDZE 736 Arpt Elev 744	JAL-6846 [USAF]	COLUMBUS/RICKENBACKER INTL (KLCK)

* When ALS inop, increase CAT CDE RVR to 4000,
** When ALS inop, increase CAT C RVR to 5000, CAT DE RVR to 6000.
*** Circling NA NW of Rwy 5L/23R.

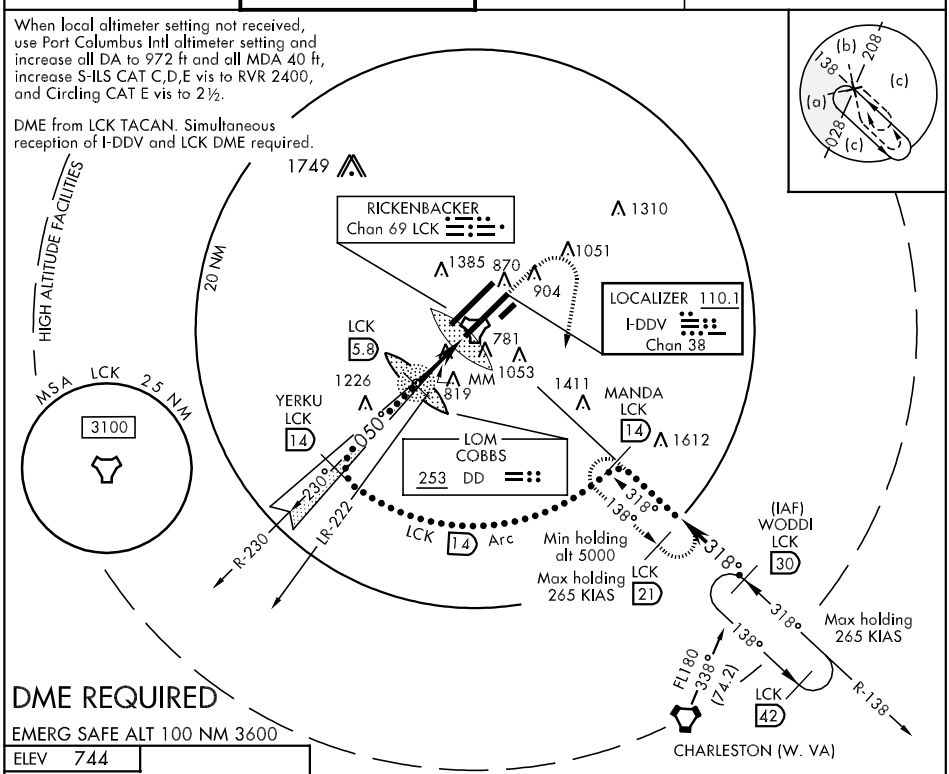
ALSF-2

MISSED APPROACH: Climb to 3000 then climbing right turn to 5000 via heading 190° and LCK R-138 to MANDA/LCK 14.0 DME and hold.

COLUMBUS APP CON	RICK TOWER	GND CON	AWOS-3
119.15 279.6	120.05 348.4	121.85 275.8	132.75

When local altimeter setting not received, use Port Columbus Intl altimeter setting and increase all DA to 972 ft and all MDA 40 ft, increase S-ILS CAT C,D,E vis to RVR 2400, and Circling CAT E vis to 2½.

DME from LCK TACAN. Simultaneous reception of I-DDV and LCK DME required.

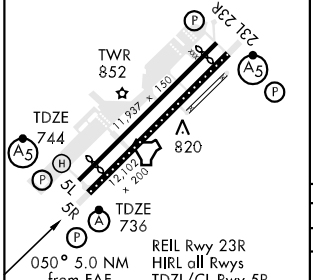


DME REQUIRED

EMERG SAFE ALT 100 NM 3600

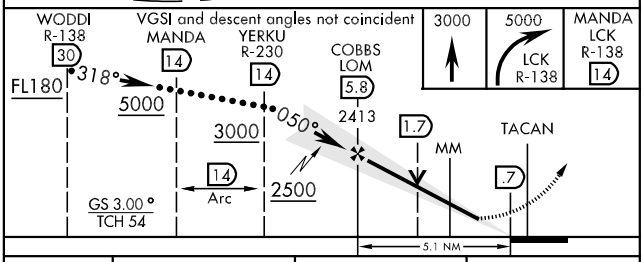
ELEV 744

Rwy 5L ldg 11,018
Rwy 23R ldg 10,934



050° 5.0 NM from FAF

REIL Rwy 23R
HIRL all Rwys
TDZL/CL Rwy 5R



FAF to MAP 5.1 NM					
Knots	120	140	160	180	200
Min:Sec	2:33	2:11	1:55	1:42	1:32

CATEGORY	C	D	E
S-ILS 5R *	936/18 200 (200-¼)		936/24 200 (200-½)
S-LOC 5R **	1080/24 344 (400-½)	1080/40 344 (400-¾)	
SIDESTEP RWY 5L	1180-1½ 444 (500-1½)	1180- 2 444 (500-2)	
CIRCLING ***	1200-1½ 456 (500-1½)	1300-2 556 (600-2)	1380-2¼ 636 (700-2¼)

HI-ILS or LOC RWY 23L

LOC I-LCK	APCH CRS	Rwy ldg 12,102 TDZE 739 Arpt Elev 744
110.1	230°	

JAL-6846 [USAF] COLUMBUS/RICKENBACKER INTL (KLCK)

*When ALS inop, increase CAT CDE RVR to 4000, increase S-LOC CAT C RVR to 6000, CAT DE vis to 1½.
**Circling NA NW of Rwy 5L-23R.

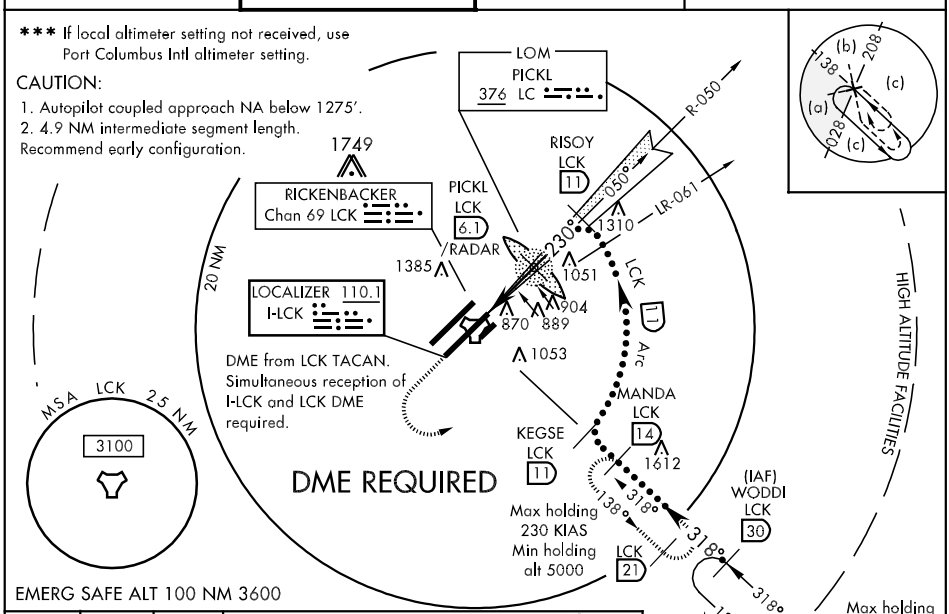
MALSR A5

MISSED APPROACH: Climb to 3000, then climbing left turn to 5000 via heading 080° and LCK R-138 to MANDA/LCK 14 DME and hold (RADAR or DME REQUIRED).

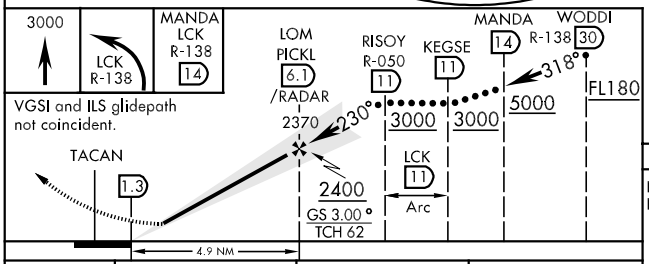
COLUMBUS APP CON	RICK TOWER	GND CON	AWOS-3
119.15 279.6	120.05 348.4	121.85 275.8	132.75

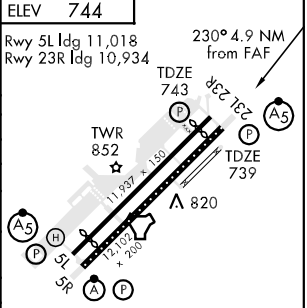
*** If local altimeter setting not received, use Port Columbus Intl altimeter setting.

CAUTION:
1. Autopilot coupled approach NA below 1275'.
2. 4.9 NM intermediate segment length.
Recommend early configuration.



EMERG SAFE ALT 100 NM 3600





CATEGORY	C	D	E
S-ILS 23L *	939/24 200 (200-½)		
S-LOC 23L	1180/40 441 (500-¾)	1180/50 441 (500-1)	
SIDESTEP RWY 23R	1220-1½ 477 (500-1½)	1220-2 477 (500-2)	
CIRCLING**	1220-1½ 476 (500-1½)	1300-2 556 (600-2)	1380-2¼ 636 (700-2¼)
*** PORT COLUMBUS INTL ALTIMETER SETTING MINIMUMS			
S-ILS 23L *	975/24 236 (300-½)		
S-LOC 23L	1220/40 481 (500-¾)	1220/50 481 (500-1)	1220/60 481 (500-1¼)
SIDESTEP RWY 23R	1260-1½ 517 (600-1½)	1260-2 517 (600-2)	
CIRCLING**	1260-1½ 516 (600-1½)	1340-2 596 (600-2)	1420-2¼ 676 (700-2¼)

FAF to MAP 4.9 NM					
Knots	120	140	160	180	200
Min:Sec	2:27	2:06	1:50	1:38	1:28

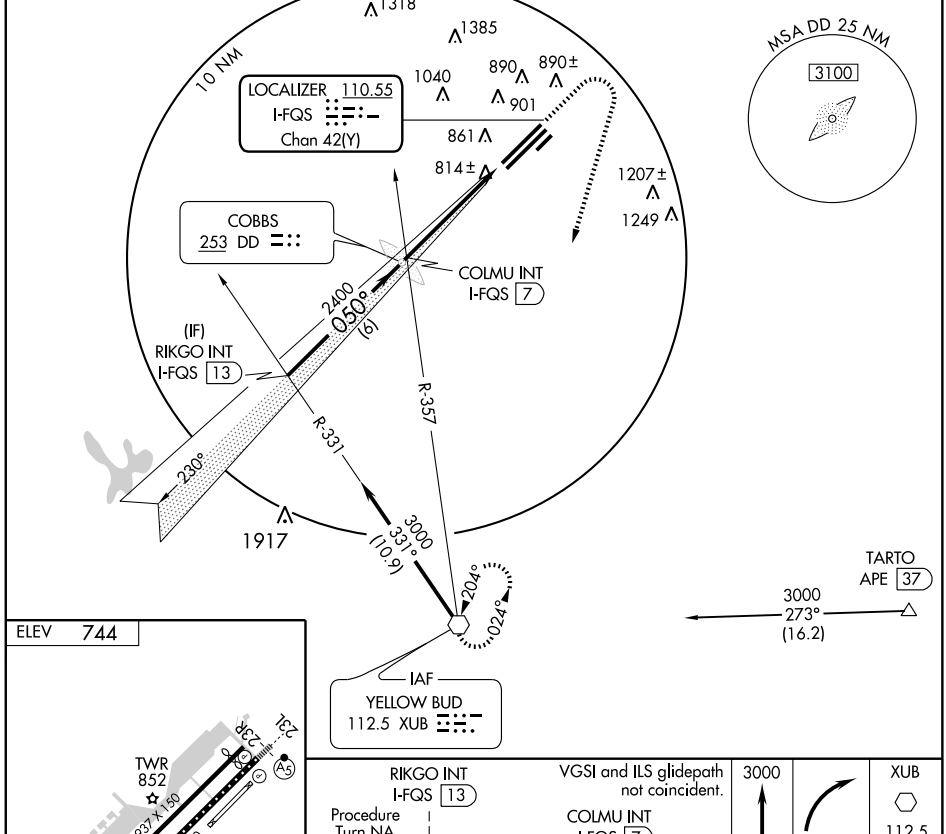
EC-2, 14 JAN 2010 to 11 FEB 2010

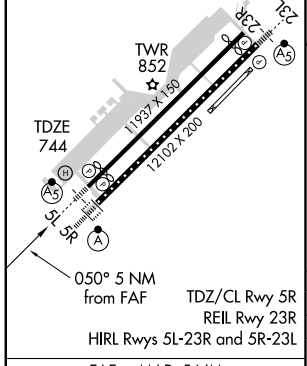
LOC/DME I-FQS	APP CRS	Rwy ldg	11018
110.55	050°	TDZE	744
Chan 42 (Y)		Apt Elev	744

ILS or LOC RWY 5L

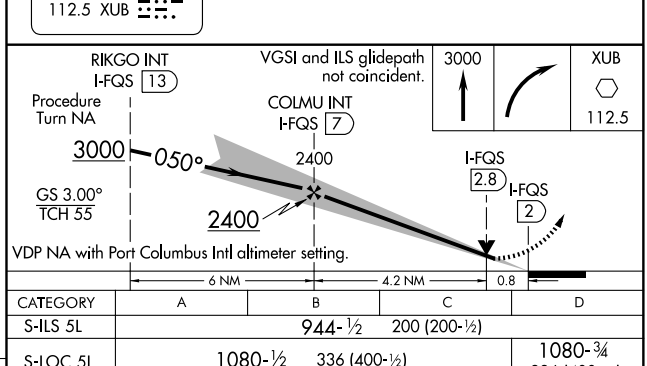
COLUMBUS / RICKENBACKER INTL (LCK)

⚠ If local altimeter setting not received, use Port Columbus Intl altimeter setting and increase all DAs to 980 feet and increase all MDAs 40 feet. Circling not authorized NW of Rwy 5L-23R. For inoperative MALSR increase S-LOC Cat D visibility to 1 mile.	MALSR (A5)	MISSED APPROACH: Climb to 3000, then right turn direct XUB VOR and hold.		
AWOS-3 132.75	COLUMBUS APP CON 119.15 279.6	RICK TOWER 120.05 348.4	GND CON 121.85 275.8	UNICOM 122.95





TDZ/CL Rwy 5R
REIL Rwy 23R
HIRL Rwys 5L-23R and 5R-23L



FAF to MAP 5 NM				
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

CATEGORY	A	B	C	D
S-ILS 5L	944-½ 200 (200-½)			
S-LOC 5L	1080-½ 336 (400-½)			1080-¾ 336 (400-¾)
CIRCLING	1180-1 436 (500-1)	1200-1 456 (500-1)	1200-1½ 456 (500-1½)	1300-2 556 (600-2)

EC-2, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-DDV	APP CRS	Rwy ldg	5R	5L
110.1	050°	TDZE	736	744
Chan 38		Apt Elev	744	744

ILS or LOC RWY 5R

COLUMBUS / RICKENBACKER INTL (LCK)

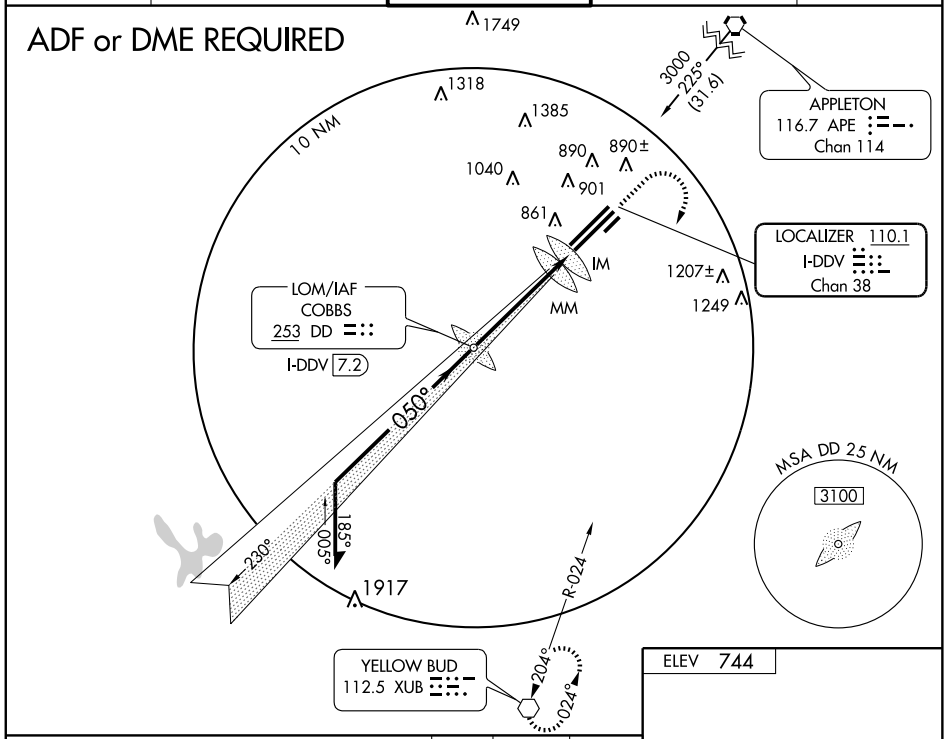
When local altimeter setting not received, use Port Columbus altimeter setting and increase all DA to 975 feet, and all MDA 40 feet; increase S-ILS 5R visibility to RVR 2400 all Cats. Circling not authorized NW of Rwy 5L-23R.

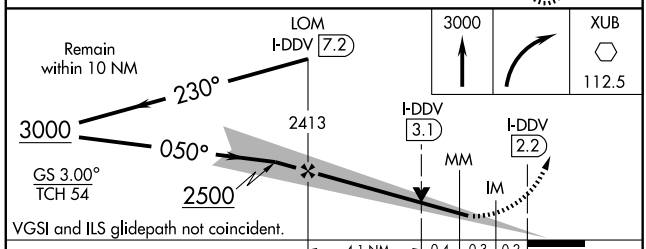
5R ALSF-2 (A) | 5L MALSR (A5)

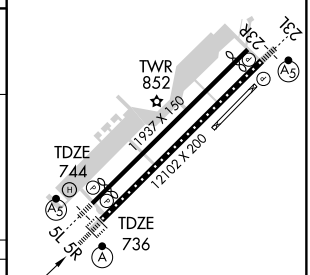
MISSED APPROACH: Climb to 3000, then right turn direct XUB VOR and hold.

AWOS-3	COLUMBUS APP CON	RICK TOWER	GND CON	UNICOM
132.75	119.15 279.6	120.05 348.4	121.85 275.8	122.95

ADF or DME REQUIRED







CATEGORY	A	B	C	D
S-ILS 5R	936/18 200 (200-½)			
S-LOC 5R	1080/24 344 (400-½)			1080/40 344 (400-¾)
SIDESTEP RWY 5L	1180-1 436 (500-1)		1180-1½ 436 (500-1½)	1180-2 436 (500-2)
CIRCLING	1180-1 436 (500-1)	1200-1 456 (500-1)	1200-1½ 456 (500-1½)	1300-2 556 (600-2)

FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

EC-2. 14 JAN 2010 to 11 FEB 2010

LOC I-LCK	APP CRS	Rwy ldg	23L	23R
110.1	230°		12102	10934
		TDZE	739	743
		Apt Elev	744	744

ILS or LOC RWY 23L

COLUMBUS / RICKENBACKER INTL (LCK)

When local altimeter setting not received, use Port Columbus Intl altimeter setting and increase all DA to 975 feet and all MDA 40 feet. Circling not authorized NW of Rwy 5L-23R.

MALSR

MISSED APPROACH: Climb to 3000, then left turn direct XUB VOR and hold.

AWOS-3	COLUMBUS APP CON	RICK TOWER	GND CON	UNICOM
132.75	119.15 279.6	120.05 348.4	121.85 275.8	122.95

ADF or RADAR REQUIRED

APPLETON 116.7 APE Chan 114

3000 221° (19.8) 050°

10 NM

1749 1749 1318 1385 890 890± 1040 901 861 1207± 1249

275° 095° 230°

LOM/IAF PICKL 376 LC RADAR

LOCALIZER 110.1 I-LCK

MISSED APCH FIX YELLOW BUD XUB 112.5 204° R-024 024°

MSA LC 25 NM 3100

ELEV 744

230° 4.9 NM from FAF

TDZE 743 TWR 852 TDZE 739 11937 X 150 12102 X 200 5L 5R

TDZ/CL Rwy 5R
REIL Rwy 23R
HIRL Rwys 5L-23R and 5R-23L

3000 XUB 112.5

VGSI and ILS glidepath not coincident.

LOM RADAR 050° 2900 230° 2372 2400 Remain within 10 NM

GS 3.00° TCH 62

4.9 NM

FAF to MAP 4.9 NM					
Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38

CATEGORY	A	B	C	D
S-ILS 23L	939/24 200 (200-½)			
S-LOC 23L	1180/24 441 (500-½)		1180/40 441 (500-¾)	1180/50 441 (500-1)
SIDESTEP RWY 23R	1220-1 477 (500-1)		1220-1½ 477 (500-1½)	1220-2 477 (500-2)
CIRCLING	1180-1 436 (500-1)	1200-1 456 (500-1)	1200-1½ 456 (500-1½)	1300-2 556 (600-2)

EC-2, 14 JAN 2010 to 11 FEB 2010

COLUMBUS, OHIO

AL-6846 (FAA)

LOC/DME I-DDV	APP CRS	Rwy ldg	12102
110.1	050°	TDZE	736
Chan 38		Apt Elev	744

ILS RWY 5R (CAT II)

COLUMBUS / RICKENBACKER INTL (LCK)

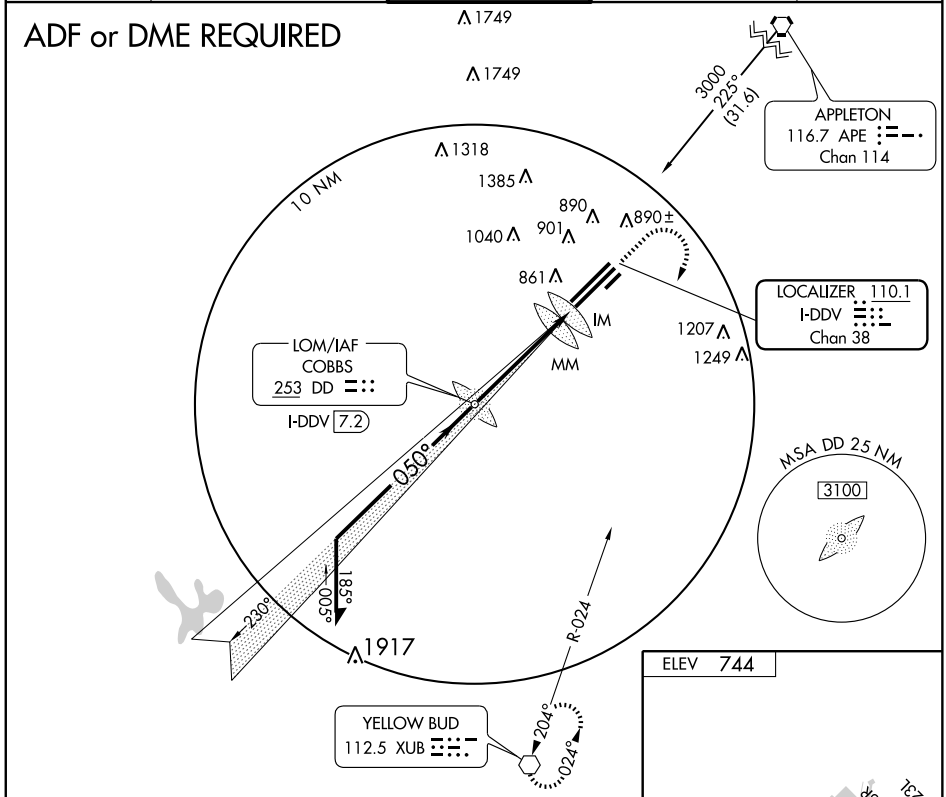
A Cat II NA when using Port Columbus altimeter setting.

ALSF2

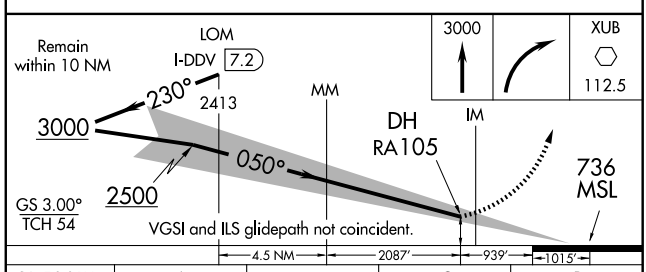
MISSED APPROACH: Climb to 3000, then turn right direct XUB VOR and hold.

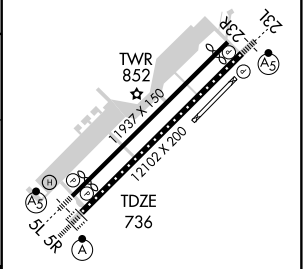
AWOS-3	COLUMBUS APP CON	RICK TOWER	GND CON	UNICOM
132.75	119.15 279.6	120.05 348.4	121.85 275.8	122.95

ADF or DME REQUIRED



ELEV 744





CATEGORY	A	B	C	D
S-ILS 5R	RA 105/12 103 DA 839			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

TDZ/CL Rwy 5R
REIL Rwy 23R
HIRL Rwys 5L-23R and 5R-23L

EC-2, 14 JAN 2010 to 11 FEB 2010

LOCKBOURNE TWO DEPARTURE

COLUMBUS, OHIO

GND CON
121.85 275.8
RICK TOWER
120.05 348.4
COLUMBUS DEP CON
119.15 279.6
UNICOM 122.95
AWOS-3 132.75

FINDLAY
108.2 FDY
Chan 19
N40°57.32'-W83°45.36'
L-28

DRYER
113.6 DJB
Chan 83
N41°21.48'-W82°09.72'
L-30, H-10

TIVERTON
116.5 TVT
Chan 112
N40°27.48'-W82°07.61'
L-29

WHEELING
112.2 HLG
Chan 59
N40°15.60'-W80°34.12'
L-29

ROSEWOOD
117.5 ROD
Chan 122
N40°17.27'-W84°02.59'
L-27, H-10

APPLETON
116.7 APE
Chan 114
N40°09.07'-W82°35.30'
L-29, H-10

NEWCOMERSTOWN
111.8 CTW
Chan 55
N40°13.75'-W81°28.59'
L-29, H-10

DAYTON
114.5 DQN
Chan 92
N40°00.99'-W84°23.81'
L-27, H-10

ZANESVILLE
111.4 ZZV
Chan 51
N39°56.45'-W81°53.56'
L-29, H-10

BELLAIRE
117.1 AIR
Chan 118
N40°01.02'-W80°49.04'
L-29, H-10-12

YORK
112.8 YRK
Chan 75
N38°38.65'-W82°58.70'
L-26

CINCINNATI
117.3 CVG
Chan 120
N39°00.96'-W84°42.20'
L-26-27, H-10

JOGER
N39°43.25'
W83°24.41'
L-29

V38 R-318
V5 R-242
R-100
R-280
090°
070°
R-222
J186 R-189
R-180 J83
V5 R-059

NOTE: Runways 5L/R turbojet departure procedures utilized for noise abatement.

NOTE: Application in Radar environment only.

NOTE: Turbojet aircraft only.

TAKE-OFF MINIMUMS:
ALL RUNWAYS, STANDARD.

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 5L or 5R: Climbing right turn to 3000' via heading 070° until crossing APE R-222, then right turn heading 090°. Expect vectors to assigned route and clearance to filed altitude 10 minutes after departure.

LOM DD	APP CRS	Rwy ldg	12102
253	051°	TDZE	736
		Apt Elev	744

NDB RWY 5R

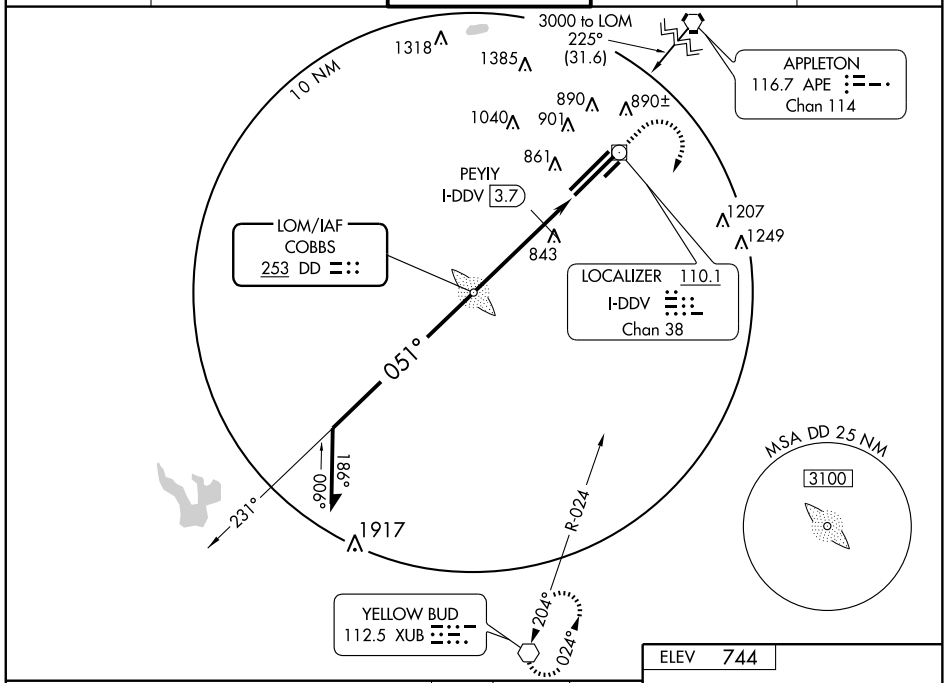
COLUMBUS / RICKENBACKER INTL (LCK)

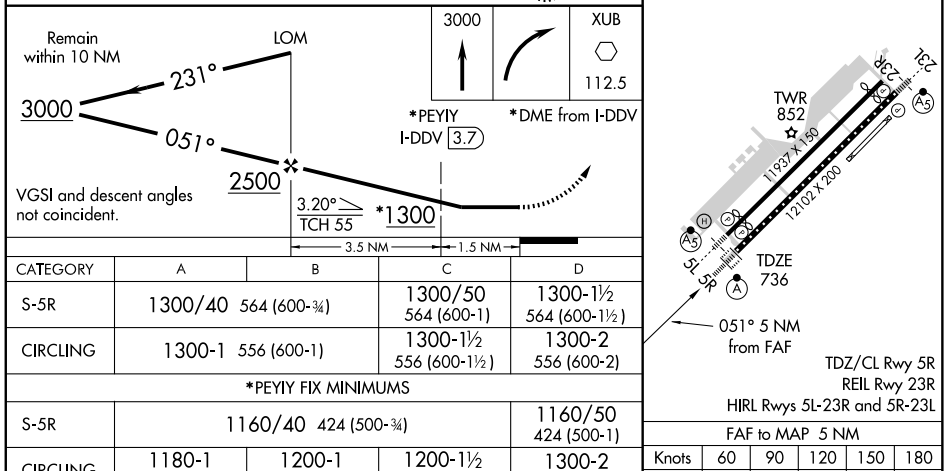
Circling NA NW of Rwy 5L-23R. When local altimeter setting not received, use Port Columbus Intl altimeter setting and increase all MDA 40 feet, increase S-5R Cat C visibility to RVR 6000, Cat D visibility to 1¾ mile and PEYIY fix minimums Cat D visibility to RVR 6000.

ALSF2

MISSED APPROACH: Climb to 3000 then right turn direct XUB VOR and hold.

AWOS-3	COLUMBUS APP CON	RICK TOWER	GND CON	UNICOM
132.75	119.15 279.6	120.05 348.4	121.85 275.8	122.95





CATEGORY	A	B	C	D
S-5R	1300/40 564 (600-¾)		1300/50 564 (600-1)	1300-1½ 564 (600-1½)
CIRCLING	1300-1 556 (600-1)		1300-1½ 556 (600-1½)	1300-2 556 (600-2)
*PEYIY FIX MINIMUMS				
S-5R	1160/40 424 (500-¾)			1160/50 424 (500-1)
CIRCLING	1180-1 436 (500-1)	1200-1 456 (500-1)	1200-1½ 456 (500-1½)	1300-2 556 (600-2)

FAF to MAP 5 NM

Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

EC-2, 14 JAN 2010 to 11 FEB 2010

LOM LC	APP CRS	Rwy ldg	12102
376	231°	TDZE	739
		Apt Elev	744

NDB RWY 23L

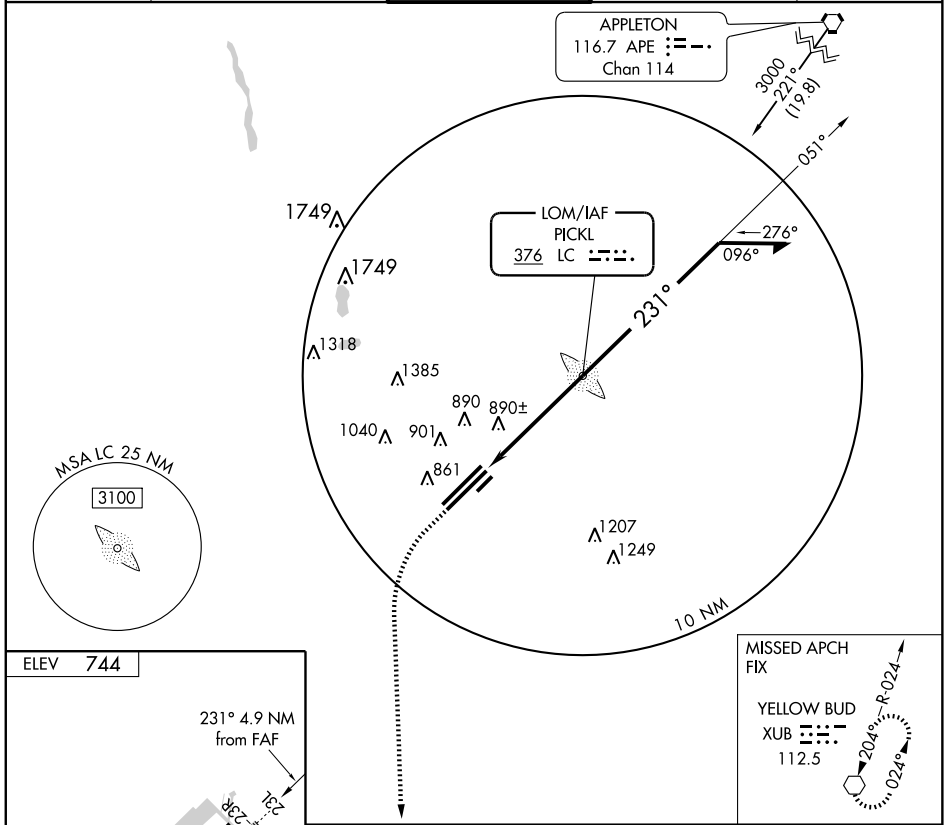
COLUMBUS / RICKENBACKER INTL (LCK)

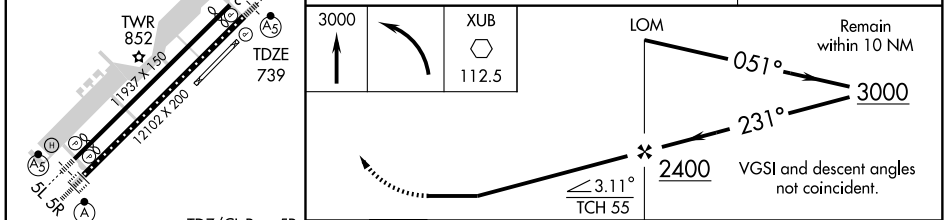
Circling NA NW of Rwy 5L-23R.
When local altimeter setting not received, use Port Columbus Intl altimeter setting and increase all MDA 40 feet.

MALSR

MISSED APPROACH: Climb to 3000 then left turn direct XUB VOR and hold.

AWOS-3	COLUMBUS APP CON	RICK TOWER	GND CON	UNICOM
132.75	119.15 279.6	120.05 348.4	121.85 275.8	122.95





TDZ/CL Rwy 5R
REIL Rwy 23R
HIRL Rwys 5L-23R and 5R-23L

FAF to MAP 4.9 NM					
Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38

CATEGORY	A	B	C	D
S-23L	1280/40 541 (600-¾)		1280/50 541 (600-1)	1280-1½ 541 (600-1½)
CIRCLING	1280-1 536 (600-1)		1280-1½ 536 (600-1½)	1300-2 556 (600-2)

WAAS CH 78410 W05A	APP CRS 050°	Rwy ldg 12102 TDZE 736 Apt Elev 744

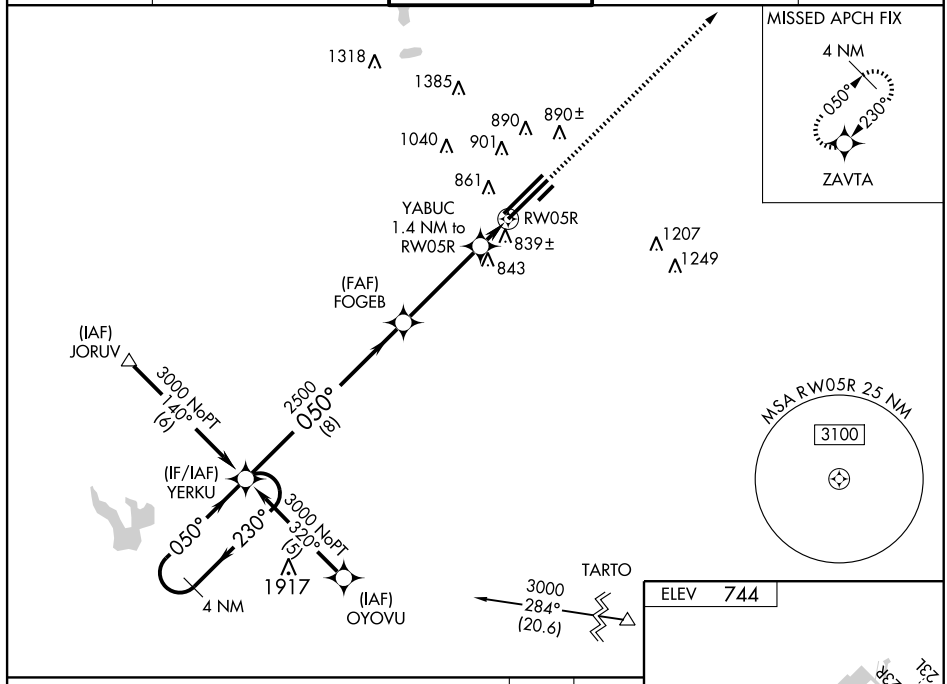
RNAV (GPS) RWY 5R
COLUMBUS / RICKENBACKER INTL (LCK)

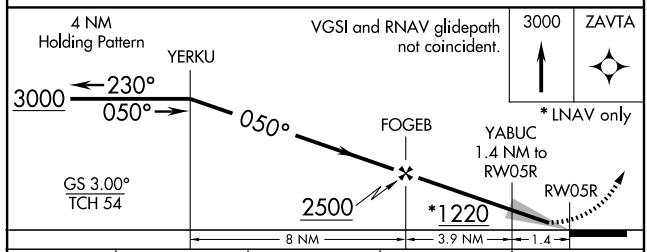
For inoperative ALSF, increase LNAV Cat D visibility to RVR 6000. Circling NA NW of Rwy 5L-23R. Baro-VNAV NA when using Port Columbus Intl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Port Columbus Intl altimeter setting and increase all DA 36 feet, increase all MDA 40 feet and LNAV Cat C visibility to RVR 4000.

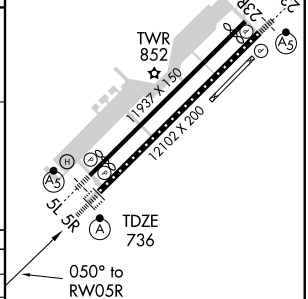
ALSF2

MISSED APPROACH: Climb to 3000 direct ZAVTA and hold.

AWOS-3	COLUMBUS APP CON	RICK TOWER	GND CON	UNICOM
132.75	119.15 279.6	120.05 348.4	121.85 275.8	122.95







CATEGORY	A	B	C	D
LPV DA	936/24 200 (200-½)			
LNAV/VNAV DA	1138/50 402 (400-1)			
LNAV MDA	1120/24 384 (400-½)			1120/50 384 (400-1)
CIRCLING	1180-1 436 (500-1)	1200-1 456 (500-1)	1200-1½ 456 (500-1½)	1300-2 556 (600-2)

TDZ/CL Rwy 5R
REIL Rwy 23R
HIRL Rwys 5L-23R and 5R-23L

WAAS CH 62811 W23A	APP CRS 230°	Rwy ldg 12102 TDZE 739 Apt Elev 744

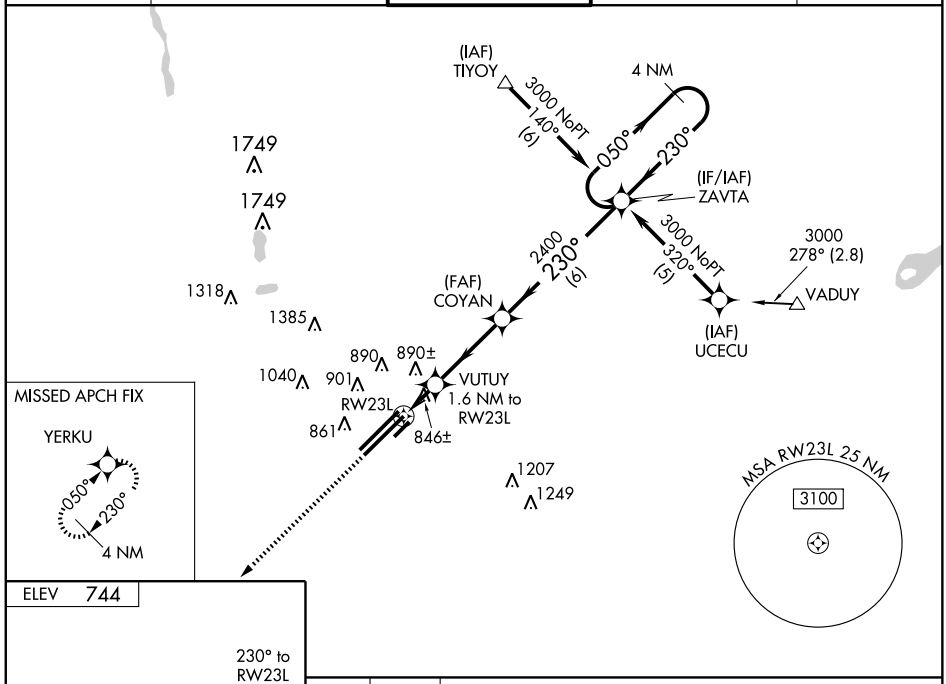
RNAV (GPS) RWY 23L
COLUMBUS / RICKENBACKER INTL (LCK)

Circling NA NW of Rwy 5L-23R. Baro-VNAV NA when using Port Columbus Intl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Port Columbus Intl altimeter setting and increase all DA 36 feet and LNAV/VNAV all Cats visibility to RVR 5000, increase all MDA 40 feet.

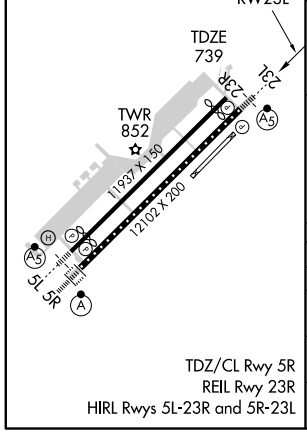
MALSR

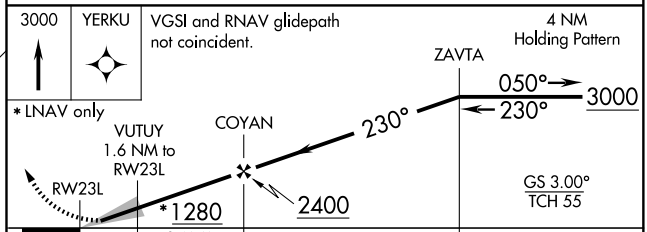
MISSED APPROACH: Climb to 3000 direct YERKU and hold.

AWOS-3	COLUMBUS APP CON	RICK TOWER	GND CON	UNICOM
132.75	119.15 279.6	120.05 348.4	121.85 275.8	122.95



ELEV 744





CATEGORY	A	B	C	D
LPV DA	939/24 200 (200-½)			
LNAV/VNAV DA	1121/40 382 (400-¾)			
LNAV MDA	1180/24 441 (500-½)		1180/40 441 (500-¾)	1180/50 441 (500-1)
CIRCLING	1180-1 436 (500-1)	1200-1 456 (500-1)	1200-1½ 456 (500-1½)	1300-2 556 (600-2)

TDZ/CL Rwy 5R
REIL Rwy 23R
HIRL Rwys 5L-23R and 5R-23L

TACAN RWY 5L

LCK TACAN Chan 69	APCH CRS 062°	Rwy ldg 11,018 TDZE 744 Arpt Elev 744

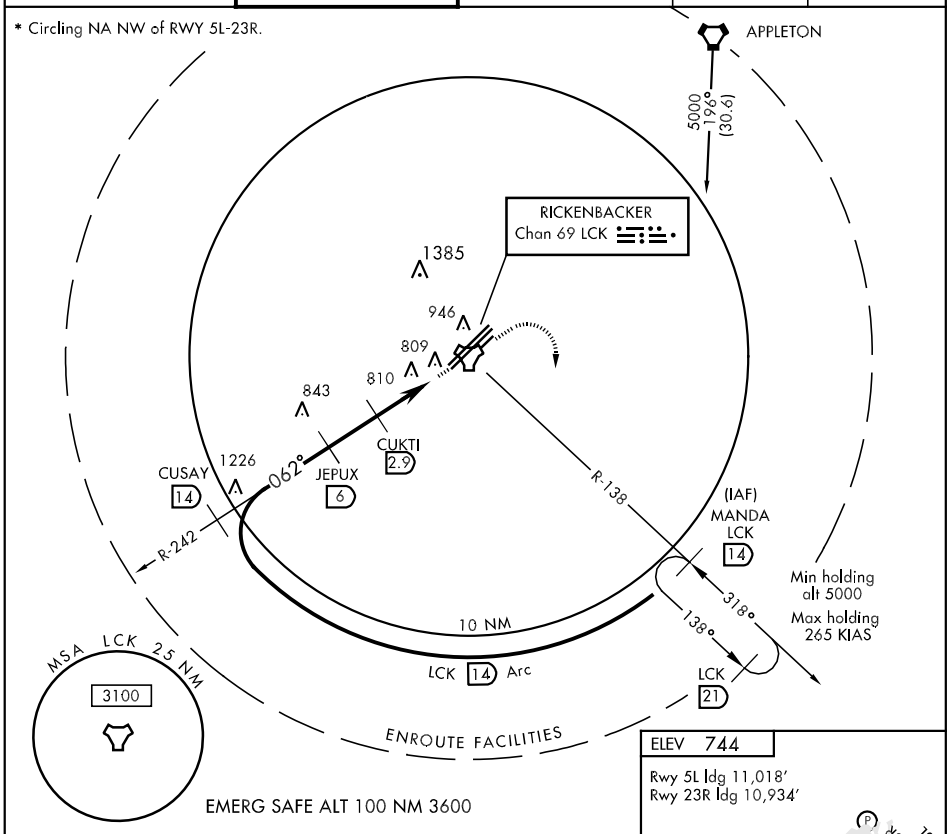
AL-6846 [USAF] COLUMBUS/ RICKENBACKER INTL (KLCK)

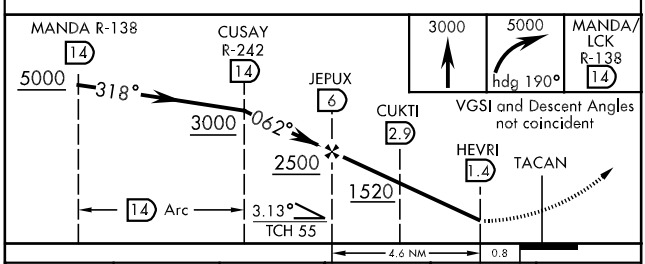
When local altimeter setting not received, use Port Columbus Intl altimeter setting, and increase all MDA 40 ft, increase CAT E vis to 1½ miles, and Circling CAT E vis to 2½ miles.

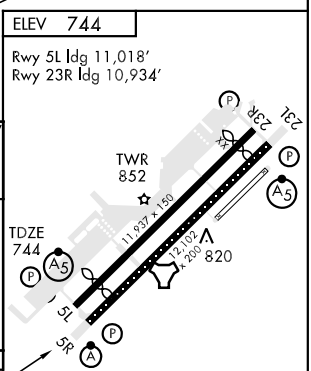
MALSR A5

MISSED APPROACH: Climb to 3000 then climbing right turn to 5000 via heading 190° and via LCK TACAN R-138 to MANDA/LCK 14.0 DME and hold.

COLUMBUS APP CON	RICK TOWER	GND CON	AWOS-3	UNICOM
119.15 279.6	120.05 348.4	121.85 275.8	132.75	122.95







CATEGORY	A	B	C	D	E
S-5L	1100-1 356 (400-1)			1100-1¼ 356 (400-1¼)	
CIRCLING *	1180-1 436 (500-1)	1200-1 456 (500-1)	1200-1½ 456 (500-1½)	1300-2 556 (600-2)	1380-2¼ 636 (700-2¼)

TACAN RWY 5R

LCK TACAN Chan 69	APCH CRS 056°	Rwy ldg 12,102 TDZE 736 Arpt Elev 744

AL-6846 [USAF] COLUMBUS/ RICKENBACKER INTL (KLCK)

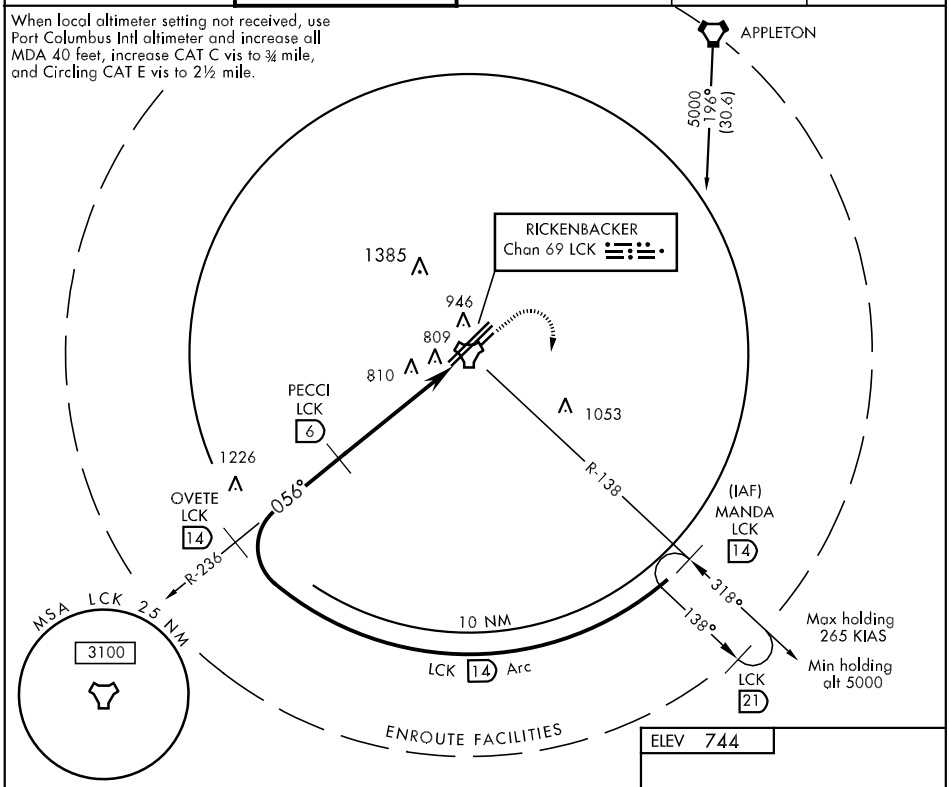
*When ALS inop, increase CAT A/B RVR to 5000, CAT C RVR to 6000, CAT D vis to 1½ mile and CAT E vis to 1¾ mile.
**Circling not authorized NW of Rwy 5L-23R.

ALSF-2

MISSED APPROACH: Climb to 3000 then climbing right turn to 5000 via hdg 190° and via LCK R-138 to MANDA/ LCK 14.0 DME and hold, continue climb-in-hold to 5000.

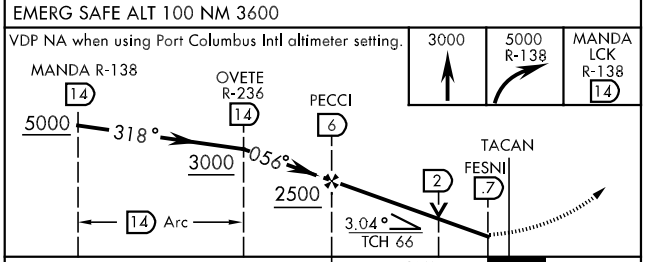
COLUMBUS APP CON	RICK TOWER	GND CON	AWOS-3	UNICOM
119.15 279.6	120.05 348.4	121.85 275.8	132.75	122.95

When local altimeter setting not received, use Port Columbus Intl altimeter and increase all MDA 40 feet, increase CAT C vis to ¾ mile, and Circling CAT E vis to 2½ mile.



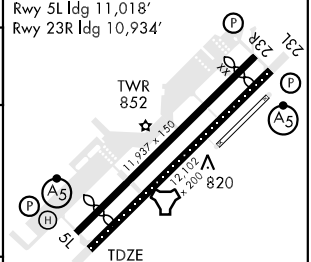
EMERG SAFE ALT 100 NM 3600

VDP NA when using Port Columbus Intl altimeter setting.



ELEV 744

Rwy 5L ldg 11,018′
Rwy 23R ldg 10,934′



TDZL/CL Rwy 5R
REIL Rwy 23R
HIRL all Rwys

CATEGORY	A	B	C	D	E
S-5R *	1200/24 464 (500-½)		1200/40 464 (500-¾)	1200/50 464 (500-1)	1200/60 464 (500-1¼)
CIRCLING**	1200-1	456 (500-1)	1200-1½ 456 (500-1½)	1300-2 556 (600-2)	1380-2¼ 636 (700-2¼)

TACAN RWY 23L

LCK TACAN Chan 69	APCH CRS 226°	Rwy ldg 12,102 TDZE 740 Arpt Elev 744

AL-6846 [USAF] COLUMBUS/ RICKENBACKER INTL (KLCK)

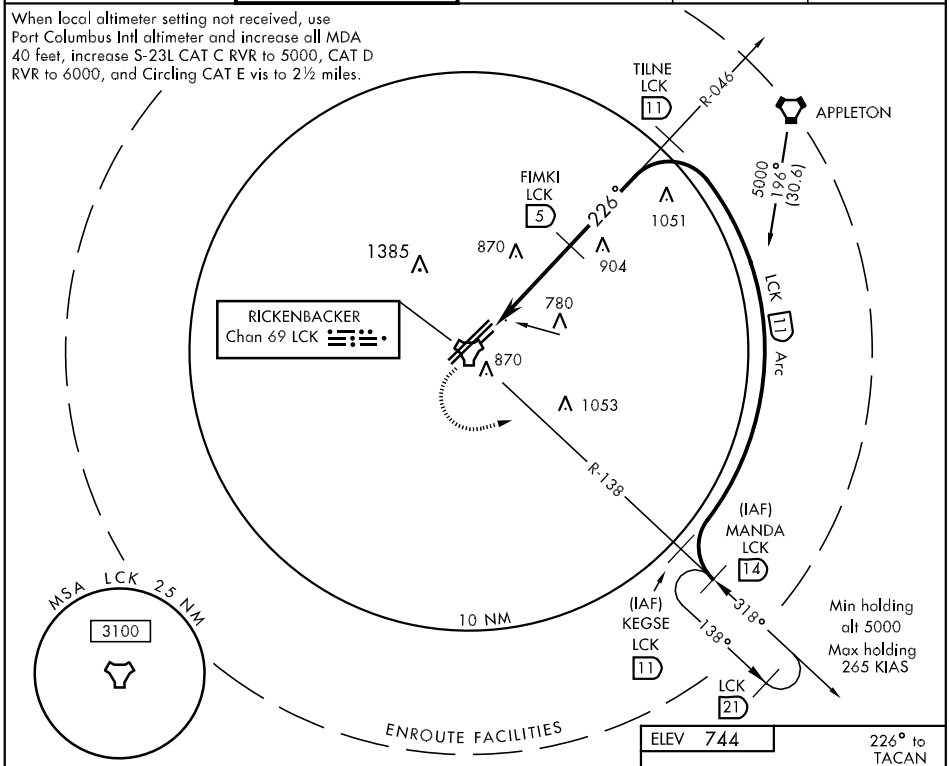
* When ALS inop, increase CAT A/B RVR to 5000, CAT C RVR to 6000, CAT D vis to 1½ miles, CAT E vis to 1¾ miles.
* * Circling NA NW of Rwy 5L-23R.

MALSR

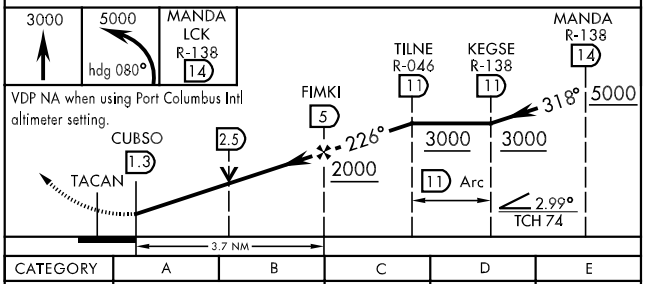
MISSED APPROACH: Climb to 3000 then climbing left turn to 5000 via heading 080° and via LCK TACAN R-138 to MANDA/LCK 14.0 DME and hold.

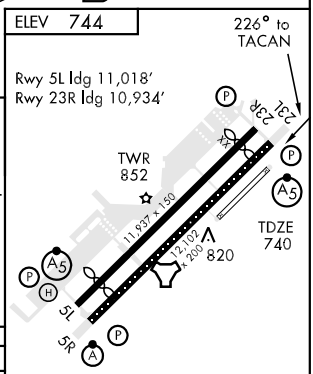
COLUMBUS APP CON	RICK TOWER	GND CON	AWOS-3	UNICOM
119.15 279.6	120.05 348.4	121.85 275.8	132.75	122.95

When local altimeter setting not received, use Port Columbus Intl altimeter and increase all MDA 40 feet, increase S-23L CAT C RVR to 5000, CAT D RVR to 6000, and Circling CAT E vis to 2½ miles.



EMERG SAFE ALT 100 NM 3600





TDZL/CL Rwy 5R
REIL Rwy 23R
HIRL all Rwys

CATEGORY	A	B	C	D	E
S-23L*	1220/24 481 (500-½)		1220/40 481 (500-¾)	1220/50 481 (500-1)	1220/60 481 (500-1¼)
CIRCLING**	1220-1 476 (500-1)		1220-1½ 476 (500-1½)	1300-2 556 (600-2)	1380-2¼ 636 (700-2¼)

TACAN RWY 23R

LCK TACAN Chan 69	APCH CRS 220°	Rwy ldg 10,934 TDZE 743 Arpt Elev 744

AL-6846 [USAF] COLUMBUS/ RICKENBACKER INTL (KLCK)

* When local altimeter setting not received, use Port Columbus Intl altimeter setting and increase all MDA 40 feet, increase CAT E vis to 1¾ mile.

MISSED APPROACH: Climb to 3000 then climbing left turn to 5000 via heading 080° and via LCK TACAN R-138 to MANDA/LCK 14.0 DME and hold.

COLUMBUS APP CON	RICK TOWER	GND CON	AWOS-3	UNICOM
119.15 279.6	120.05 348.4	121.85 275.8	132.75	122.95

**Circling NA NW of RWY 5L-23R
VDP NA when using Port Columbus Intl altimeter setting

SICOP 11 R-040
APPLETON
220°
1051
5000
196°
(30.6)
1385
929
870
OYAYO 904
5
780
870
1053
LCK 11 Arc
RICKENBACKER
Chan 69 LCK
R-138
(IAF)
MANDA
LCK
14
KEGSE
LCK
11
318°
138°
Min holding alt 5000
Max holding 265 KIAS
10 NM
MSA LCK 25 NM
3100
LCK
21
ENROUTE FACILITIES

EMERG SAFE ALT 100 NM 3600

3000 5000 hdg 080°
VGSI and Descent Angles not coincident
SICOP R-040 11
KEGSE 11
MANDA R-138 14
5000
318°
3000 3000
11 Arc
2.93°
TCH 55
OYAYO 5
220°
2000
TACAN
JAVKI 1.6
2.3
.5
3.4

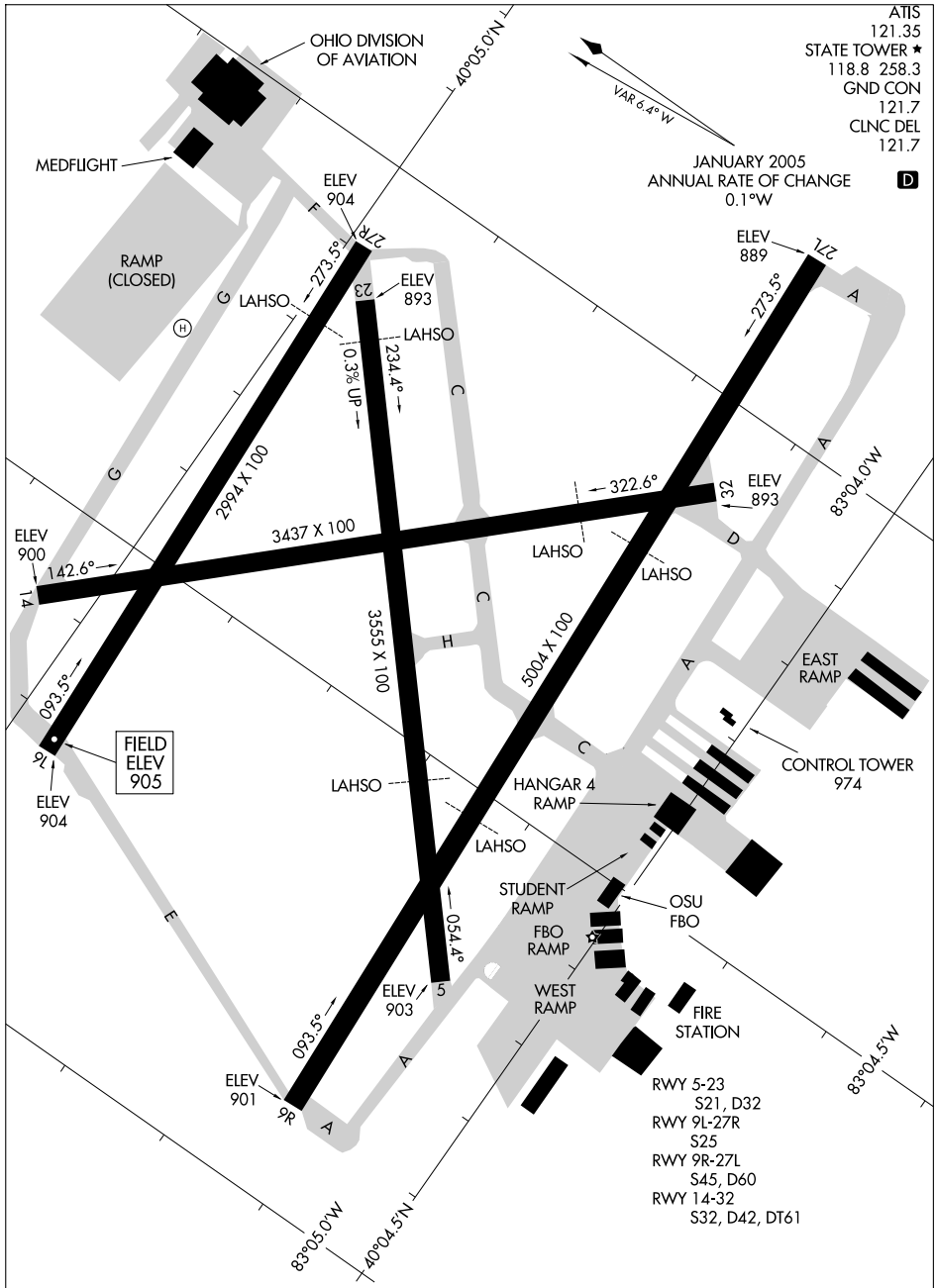
ELEV 744
220° to TACAN
Rwy 5L ldg 11,018'
Rwy 23R ldg 10,934'
TDZE 743
TWR 852
11,937' x 150
12,102' x 200'
820
5L
5R
23L
23R
TDZL/CL Rwy 5R
REIL Rwy 23R
HIRL all Rwys

CATEGORY	A	B	C	D	E
S-23R *	1180-1 437 (500-1)		1180-1¼ 437 (500-1¼)	1180-1½ 437 (500-1½)	
CIRCLING **	1180-1 436 (500-1)	1200-1 456 (500-1)	1200-1½ 456 (500-1½)	1300-2 556 (600-2)	1380-2¼ 636 (700-2¼)

AIRPORT DIAGRAM

AL-5387 (FAA)

COLUMBUS/OHIO STATE UNIVERSITY (OSU)
COLUMBUS, OHIO



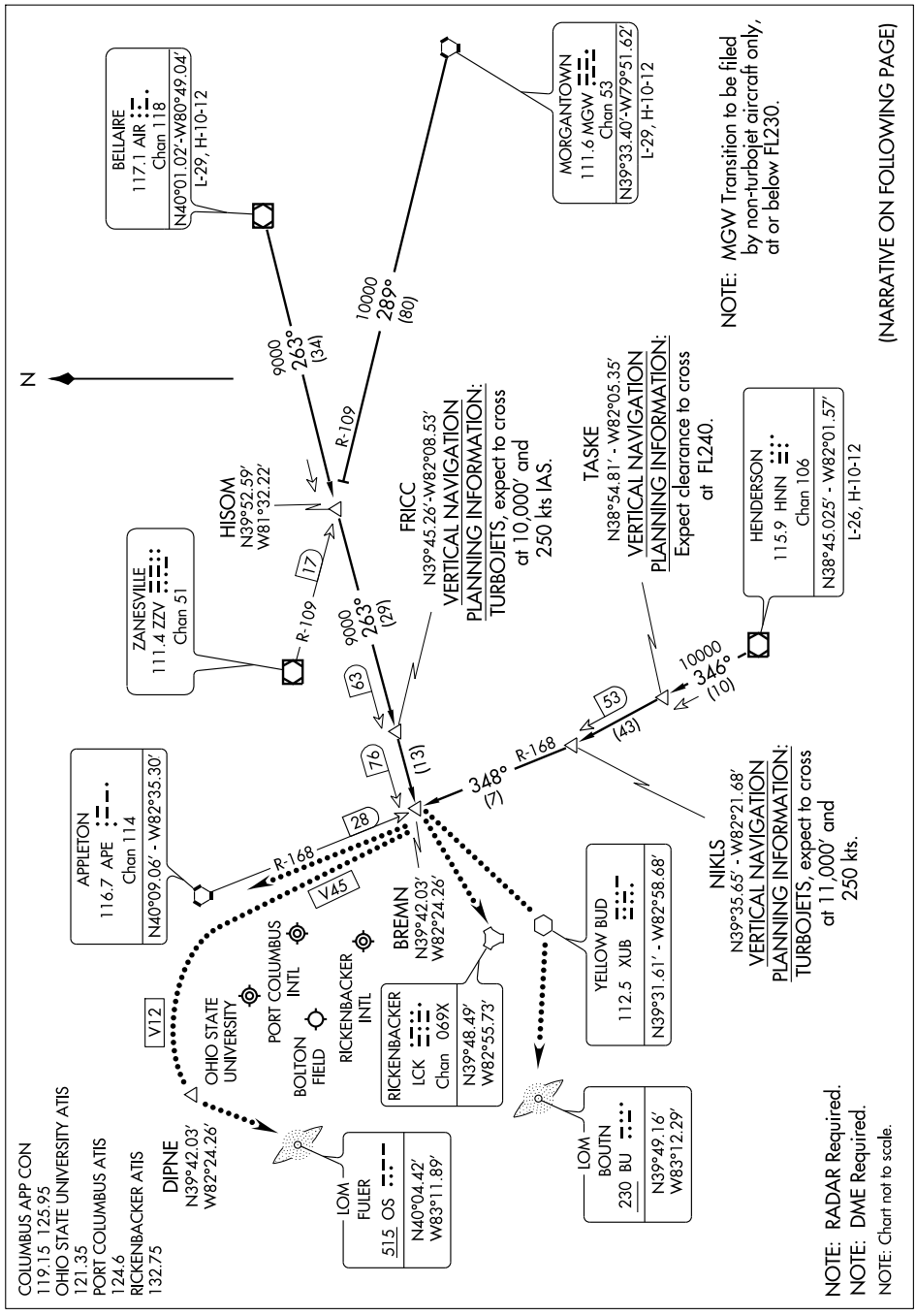
CAUTION: BE ALERT TO RUNWAY CROSSING CLEARANCES.
READBACK OF ALL RUNWAY HOLDING INSTRUCTIONS IS REQUIRED.

(BREMN.BREMN3) 08269

BREMN THREE ARRIVAL

ST-94 (FAA)

COLUMBUS, OHIO



ARRIVAL ROUTE DESCRIPTION

BELLAIRE TRANSITION (AIR.BREMN3): From over AIR VOR/DME via AIR R-263 to BREMN INT. Thence. . . .
HENDERSON TRANSITION (HNN.BREMN3): From over HNN VOR/DME via HNN R-346 to NIKLS INT, then via APE R-168 to BREMN INT. Thence. . . .
MORGANTOWN TRANSITION (MGW.BREMN3): From over MGW VORTAC via MGW R-289 and ZZV R-109 to HISOM, then via AIR R-263 to BREMN. Thence. . . .

. . . . From over BREMN DME expect radar vectors to final approach course.

LOST COMMUNICATION PROCEDURE:
LANDING PORT COLUMBUS INTL: From BREMN INT direct APE VORTAC, maintain 3000 until APE VORTAC.
LANDING OHIO STATE UNIVERSITY: From BREMN INT via V45 to APE VORTAC then via V12 to DIPNE INT then direct FULER (OS) LOM, maintain 3000 until FULER (OS) LOM.
LANDING RICKENBACKER INTL: From BREMN INT direct LCK TACAN, maintain 3000 until LCK TACAN.
LANDING BOLTON FIELD: From BREMN INT to XUB VOR direct BOUTN (BU) LOM, Maintain 3000 until BOUTN (BU) LOM.

EC-2, 14 JAN 2010 to 11 FEB 2010

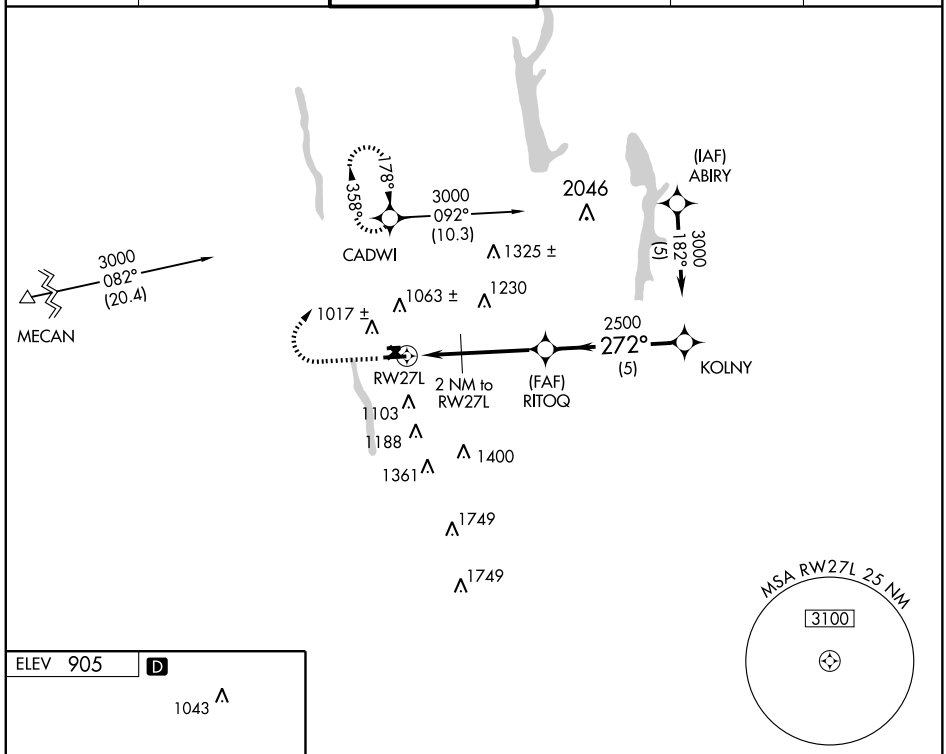
APP CRS	Rwy ldg	5004
272°	TDZE	903
	Apt Elev	905

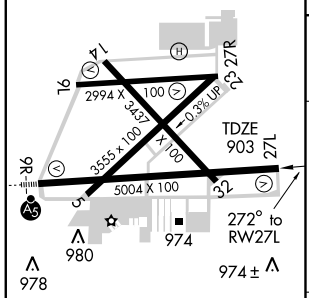
GPS RWY 27L
COLUMBUS/OHIO STATE UNIVERSITY (OSU)

A NA

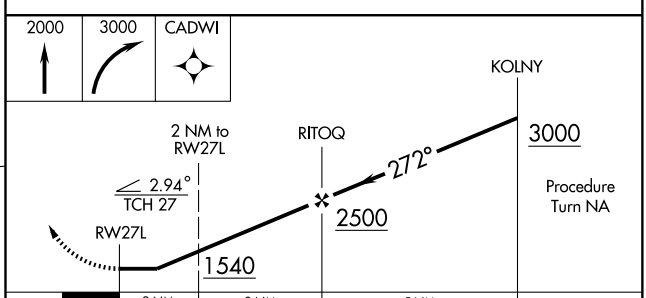
MISSED APPROACH: Climb to 2000, then climbing right turn to 3000 direct CADWI WP and hold.

ATIS	COLUMBUS APP CON	STATE TOWER★	GND CON	CLNC DEL	UNICOM
121.35	120.2 317.775	118.8 (CTAF) L 258.3	121.7	121.7	122.95





REIL Rwy 27L
HIRL Rwy 9R-27L
MIRL Rwys 9L-27R, 14-32 and 5-23

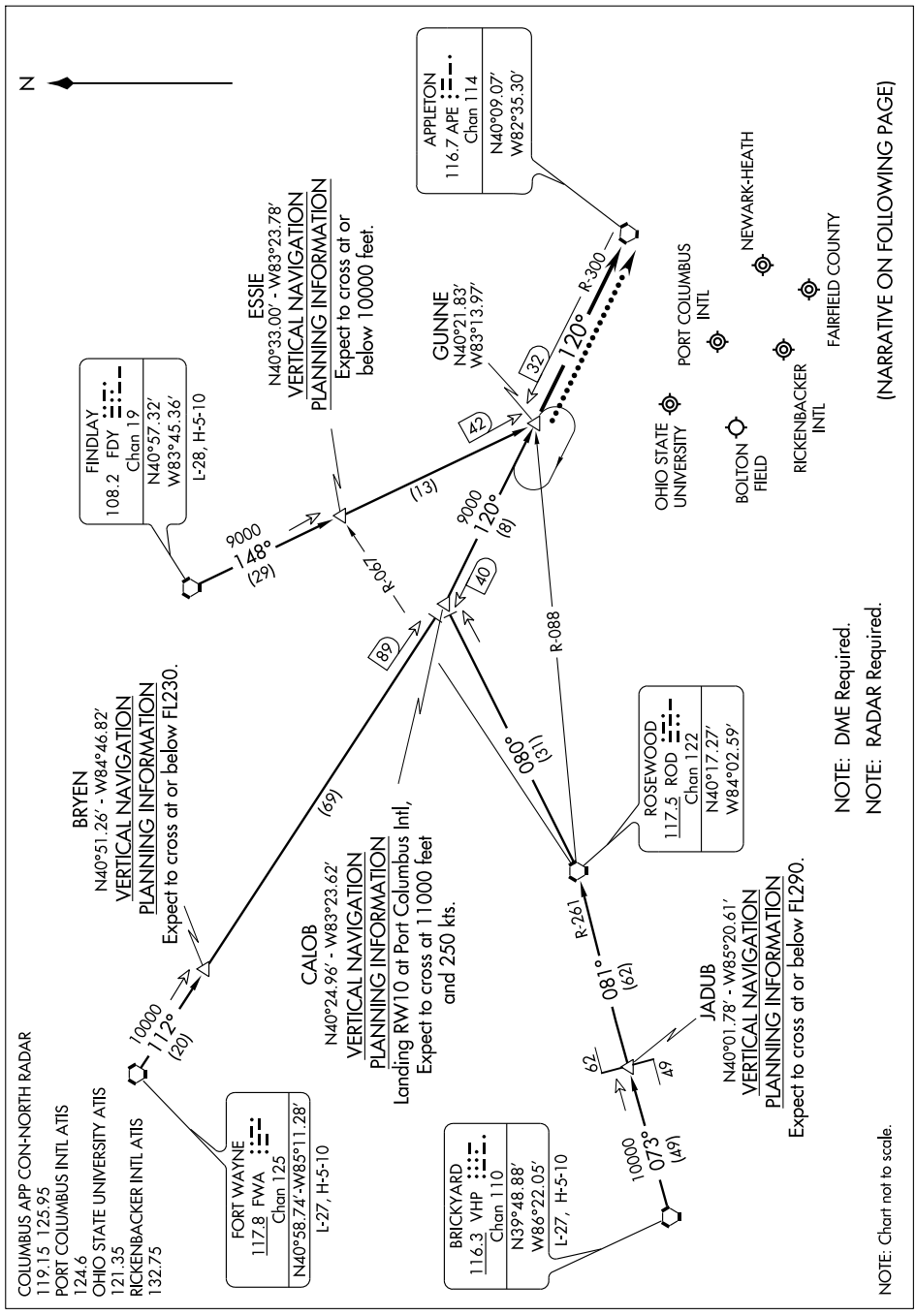


CATEGORY	A	B	C	D
S-27L	1280-1 377 (400-1)			1280-1¼ 377 (400-1¼)
CIRCLING	1380-1 475 (500-1)		1380-1½ 475 (500-1½)	1460-2 555 (600-2)

EC-2, 14 JAN 2010 to 11 FEB 2010

GUNNE ONE ARRIVAL

COLUMBUS, OHIO



GUNNE ONE ARRIVAL

ARRIVAL ROUTE DESCRIPTION

BRICKYARD TRANSITION (VHP.GUNNE1): From over VHP VORTAC via VHP R-073 to JADUB INT, then via ROD R-261 to ROD VORTAC, then via ROD R-080 to CALOB INT, then via APE R-300 to GUNNE INT. Thence. . . .

FINDLEY TRANSITION (FDY.GUNNE1): From over FDY VORTAC via FDY R-148 to GUNNE INT. Thence. . . .

FORT WAYNE TRANSITION (FWA.GUNNE1): From over FWA VORTAC via FWA R-112 to CALOB INT, then via APE R-300 to GUNNE INT. Thence. . . .

. . . .From over GUNNE via heading 120°. Expect radar vectors to final approach course.

LOST COMMUNICATION PROCEDURE:

For all airports - From over GUNNE INT direct APE VORTAC, maintain 4000 and hold.

LOC I-OSU	APP CRS	Rwy ldg	5004
108.5	092°	TDZE	905
		Apt Elev	905

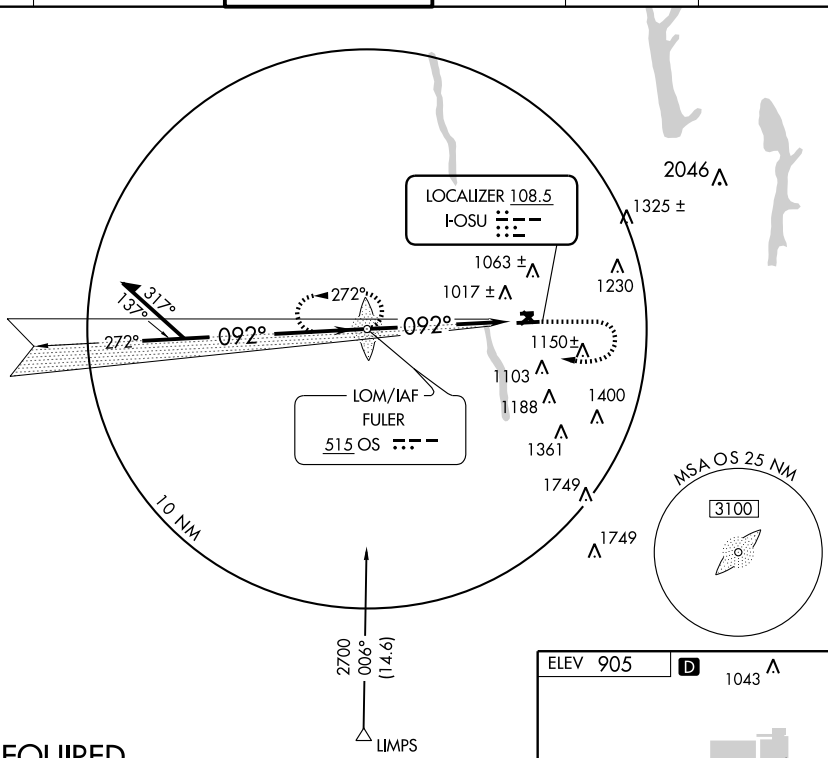
ILS or LOC RWY 9R
COLUMBUS/OHIO STATE UNIVERSITY (OSU)

A

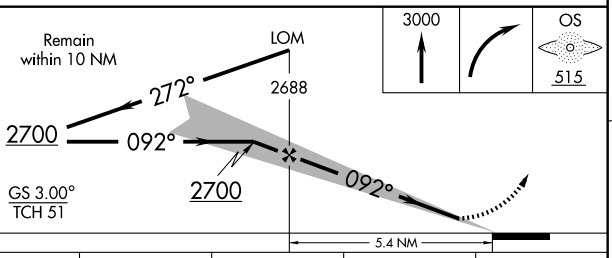
MALSR

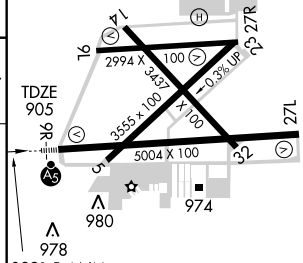
MISSED APPROACH: Climb to 3000, then right turn direct OS LOM and hold.

ATIS	COLUMBUS APP CON	STATE TOWER★	GND CON	CLNC DEL	UNICOM
121.35	120.2 317.775	118.8 (CTAF) L 258.3	121.7	121.7	122.95



ADF REQUIRED





092° 5.4 NM
from FAF
REIL Rwy 27L
HIRL Rwy 9R-27L
MIRL Rwys 9L-27R, 14-32 and 5-23

CATEGORY	A	B	C	D
S-ILS 9R	1105-½ 200 (200-½)			
S-LOC 9R	1360-½ 455 (500-½)		1360-¾ 455 (500-¾)	1360-1 455 (500-1)
CIRCLING	1380-1 475 (500-1)		1380-1½ 475 (500-1½)	1460-2 555 (600-2)

FAF to MAP 5.4 NM

Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48

EC-2. 14 JAN 2010 to 11 FEB 2010

LOM OS	APP CRS	Rwy ldg / TDZE / Apt Elev
515	092°	5004 / 905 / 906

NDB RWY 9R

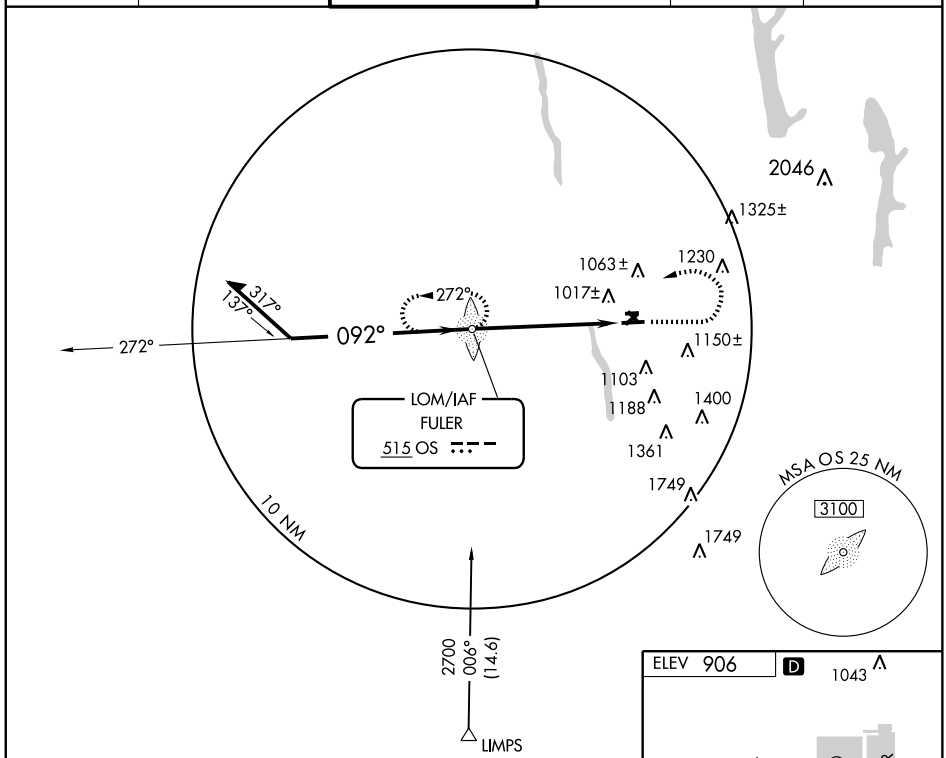
COLUMBUS/OHIO STATE UNIVERSITY (OSU)

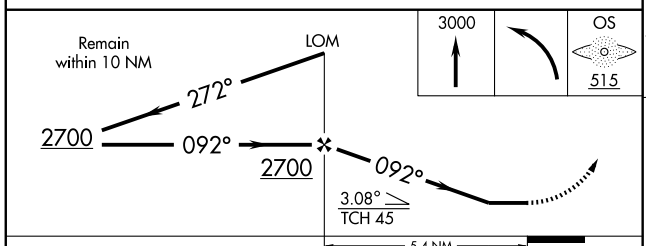
A

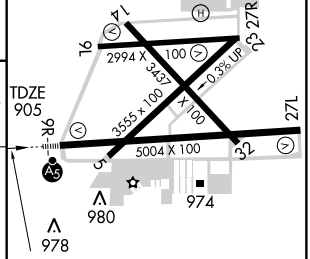
MALSR

MISSED APPROACH: Climb to 3000, then left turn direct OS LOM and hold.

ATIS	COLUMBUS APP CON	STATE TOWER★	GND CON	CLNC DEL	UNICOM
121.35	120.2 317.775	118.8 (CTAF) L 258.3	121.7	121.7	122.95







092° 5.4 NM from FAF

REIL Rwy 27L
HIRL Rwy 9R-27L
MIRL Rwys 9L-27R, 14-32 and 5-23

CATEGORY	A	B	C	D
S-9R	1400-¾ 495 (500-¾)			1400-1¼ 495 (500-1¼)
CIRCLING	1400-1 495 (500-1)		1400-1½ 495 (500-1½)	1460-2 555 (600-2)

FAF to MAP 5.4 NM

Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48

EC-2. 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	5004
092°	TDZE	905
	Apt Elev	905

RNAV (GPS) RWY 9R
COLUMBUS/OHIO STATE UNIVERSITY (OSU)

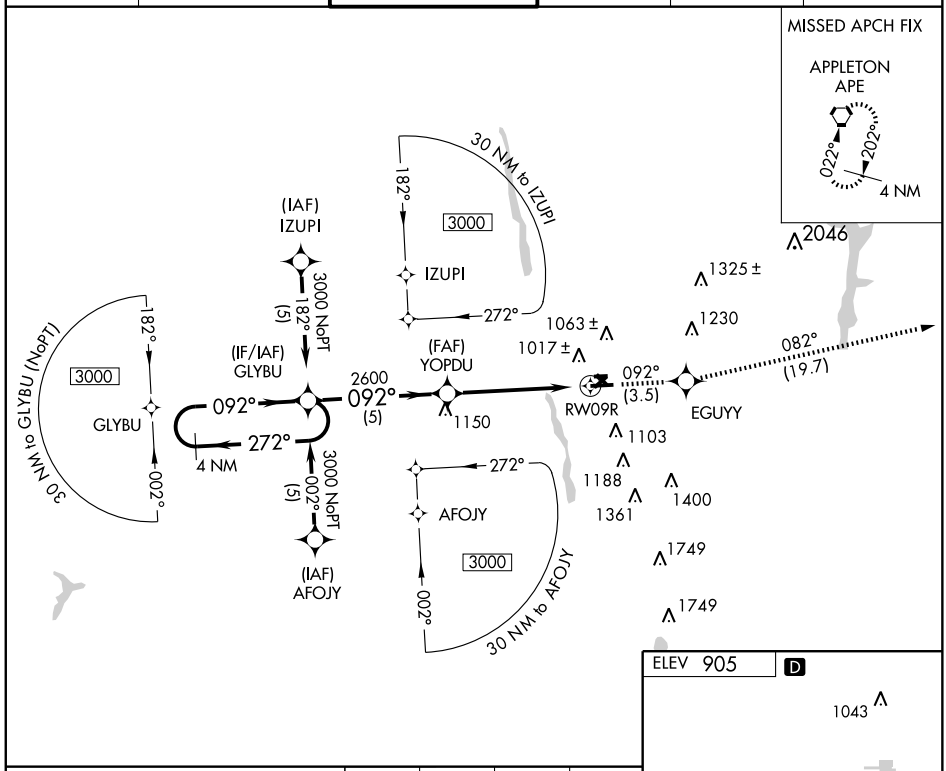
NA

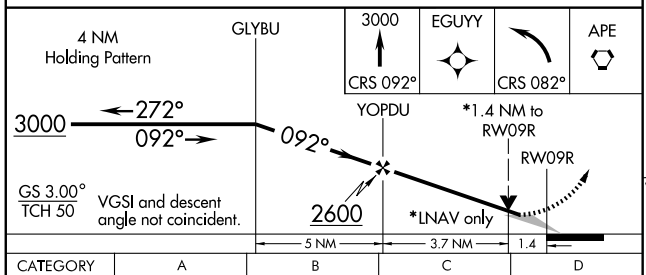
DME/DME RNP-0.3 NA.
Baro-VNAV NA below -16°C (4°F).

MALSR

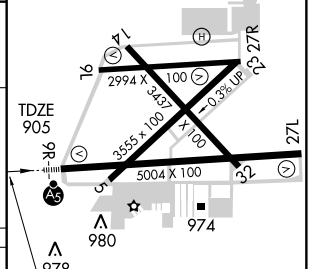
MISSED APPROACH: Climb to 3000 via course 092° to EGUYY WP, then left turn via 082° course to APE VORTAC and hold.

ATIS	COLUMBUS APP CON		STATE TOWER*	GND CON	CLNC DEL	UNICOM
121.35	120.2	317.775	118.8 (CTAF) 258.3	121.7	121.7	122.95





CATEGORY	A	B	C	D
LNAV/VNAV DA	1280- ¾ 375 (400-¾)			
LNAV MDA	1400-½ 495 (500-½)		1400- ¾ 495 (500-¾)	1400-1 495 (500-1)
CIRCLING	1400-1¼ 495 (500-1¼)		1400-1½ 495 (500-1½)	1460-2 555 (600-2)



REIL Rwy 27L
HIRL Rwy 9R-27L
MIRL Rwys 9L-27R, 14-32 and 5-23

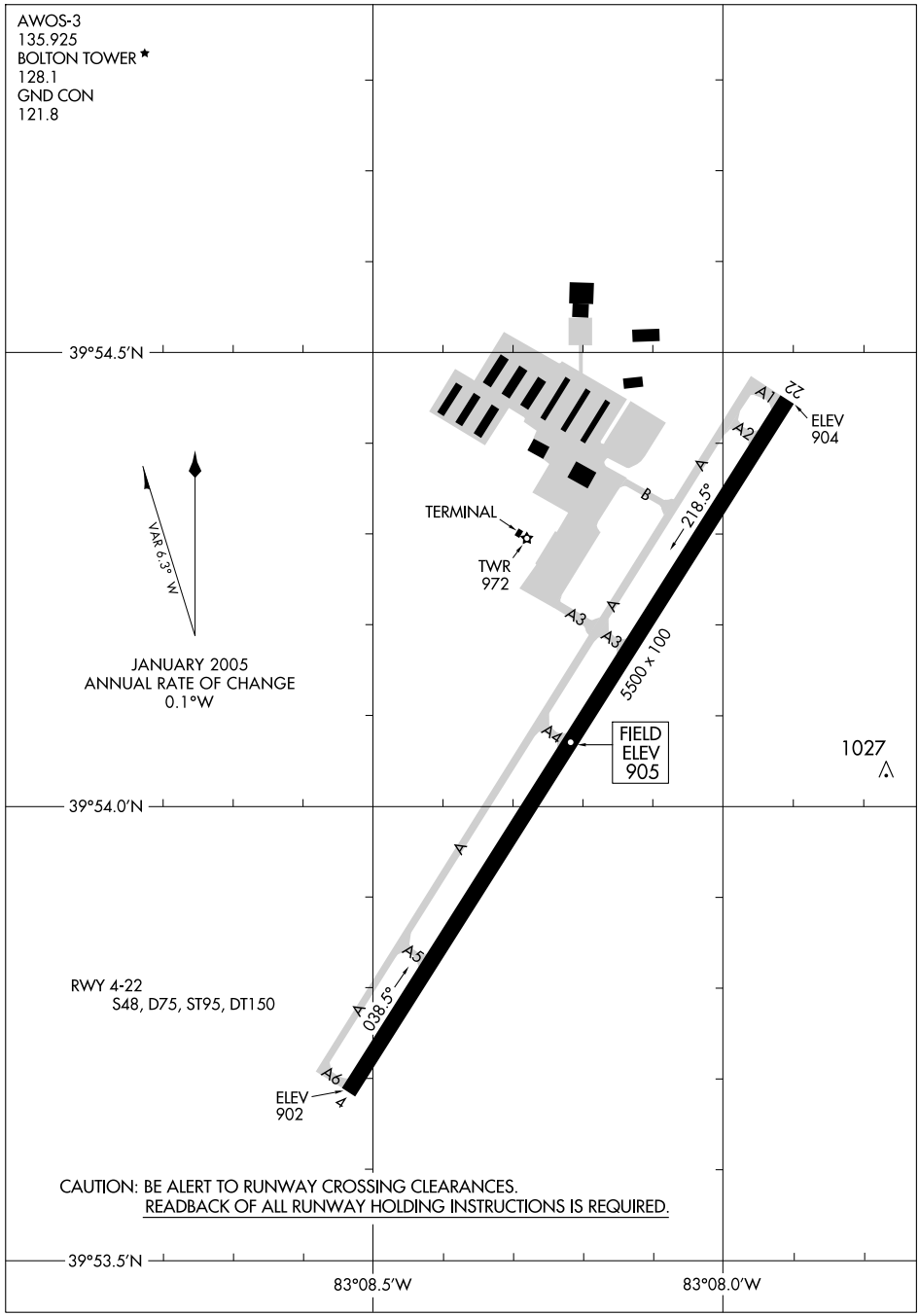
EC-2, 14 JAN 2010 to 11 FEB 2010

09295

AIRPORT DIAGRAM

AL-5958 (FAA)

COLUMBUS/ BOLTON FIELD (TZR)
COLUMBUS, OHIO



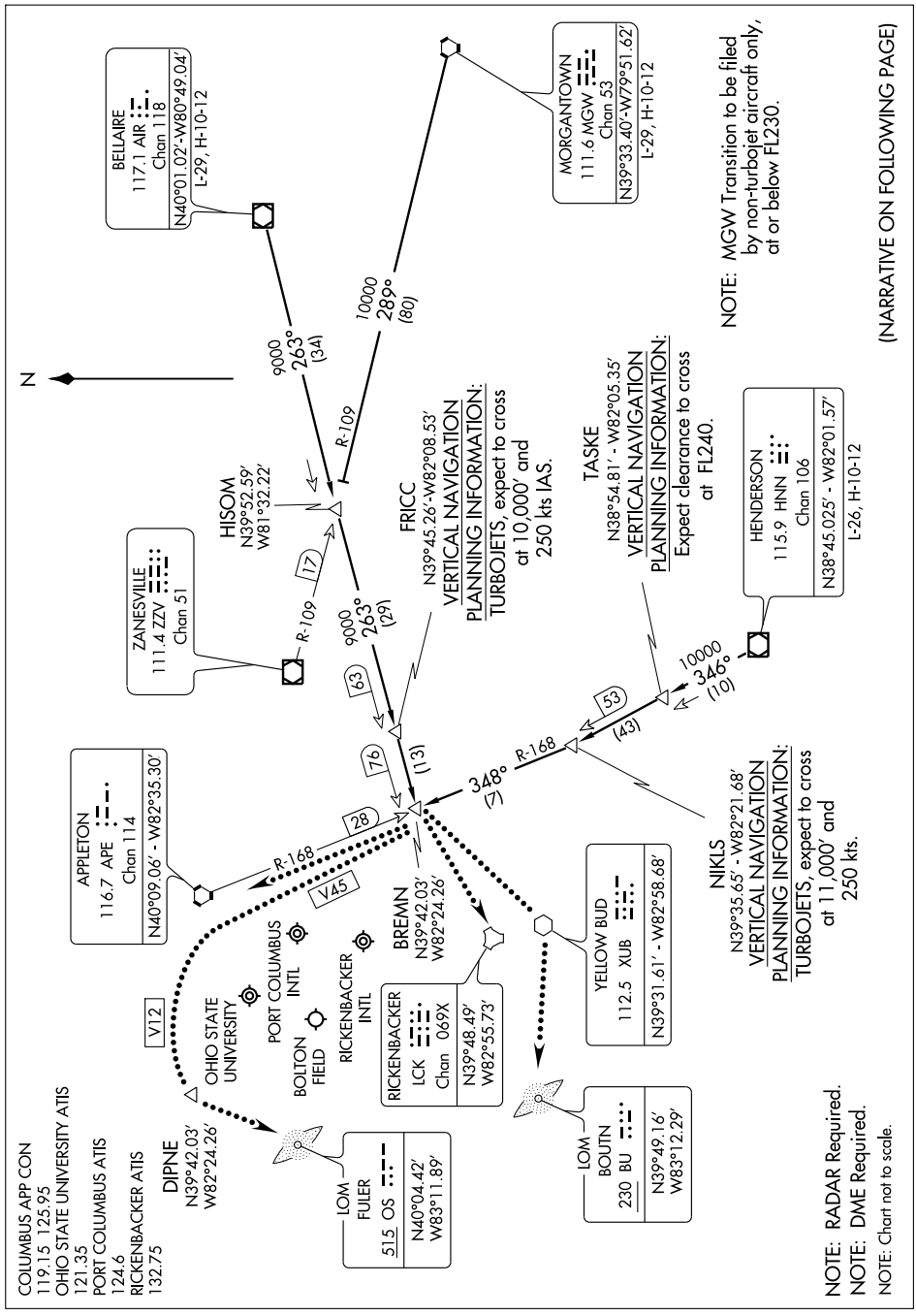
EC-2, 14 JAN 2010 to 11 FEB 2010

(BREMN.BREMN3) 08269

BREMN THREE ARRIVAL

ST-94 (FAA)

COLUMBUS, OHIO



ARRIVAL ROUTE DESCRIPTION

BELLAIRE TRANSITION (AIR.BREMN3): From over AIR VOR/DME via AIR R-263 to BREMN INT. Thence. . . .
HENDERSON TRANSITION (HNN.BREMN3): From over HNN VOR/DME via HNN R-346 to NIKLS INT, then via APE R-168 to BREMN INT. Thence. . . .
MORGANTOWN TRANSITION (MGW.BREMN3): From over MGW VORTAC via MGW R-289 and ZZV R-109 to HISOM, then via AIR R-263 to BREMN. Thence. . . .

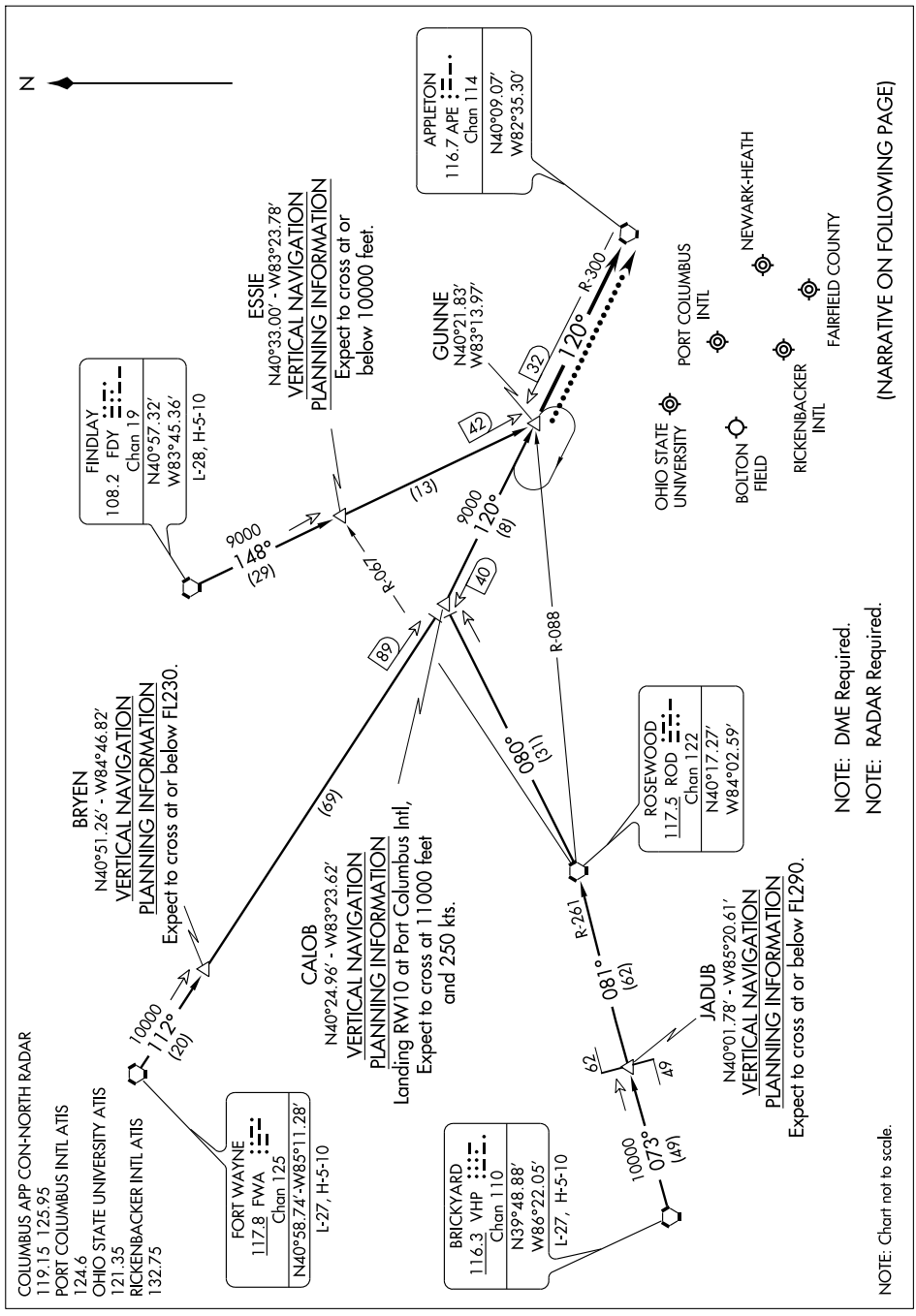
. . . . From over BREMN DME expect radar vectors to final approach course.

LOST COMMUNICATION PROCEDURE:
LANDING PORT COLUMBUS INTL: From BREMN INT direct APE VORTAC, maintain 3000 until APE VORTAC.
LANDING OHIO STATE UNIVERSITY: From BREMN INT via V45 to APE VORTAC then via V12 to DIPNE INT then direct FULER (OS) LOM, maintain 3000 until FULER (OS) LOM.
LANDING RICKENBACKER INTL: From BREMN INT direct LCK TACAN, maintain 3000 until LCK TACAN.
LANDING BOLTON FIELD: From BREMN INT to XUB VOR direct BOUTN (BU) LOM, Maintain 3000 until BOUTN (BU) LOM.

EC-2, 14 JAN 2010 to 11 FEB 2010

GUNNE ONE ARRIVAL

COLUMBUS, OHIO



GUNNE ONE ARRIVAL

ARRIVAL ROUTE DESCRIPTION

BRICKYARD TRANSITION (VHP.GUNNE1): From over VHP VORTAC via VHP R-073 to JADUB INT, then via ROD R-261 to ROD VORTAC, then via ROD R-080 to CALOB INT, then via APE R-300 to GUNNE INT. Thence. . . .

FINDLEY TRANSITION (FDY.GUNNE1): From over FDY VORTAC via FDY R-148 to GUNNE INT. Thence. . . .

FORT WAYNE TRANSITION (FWA.GUNNE1): From over FWA VORTAC via FWA R-112 to CALOB INT, then via APE R-300 to GUNNE INT. Thence. . . .

. . . .From over GUNNE via heading 120°. Expect radar vectors to final approach course.

LOST COMMUNICATION PROCEDURE:

For all airports - From over GUNNE INT direct APE VORTAC, maintain 4000 and hold.

LOC I-BUZ	APP CRS	Rwy ldg	5500
111.7	037°	TDZE	905
		Apt Elev	905

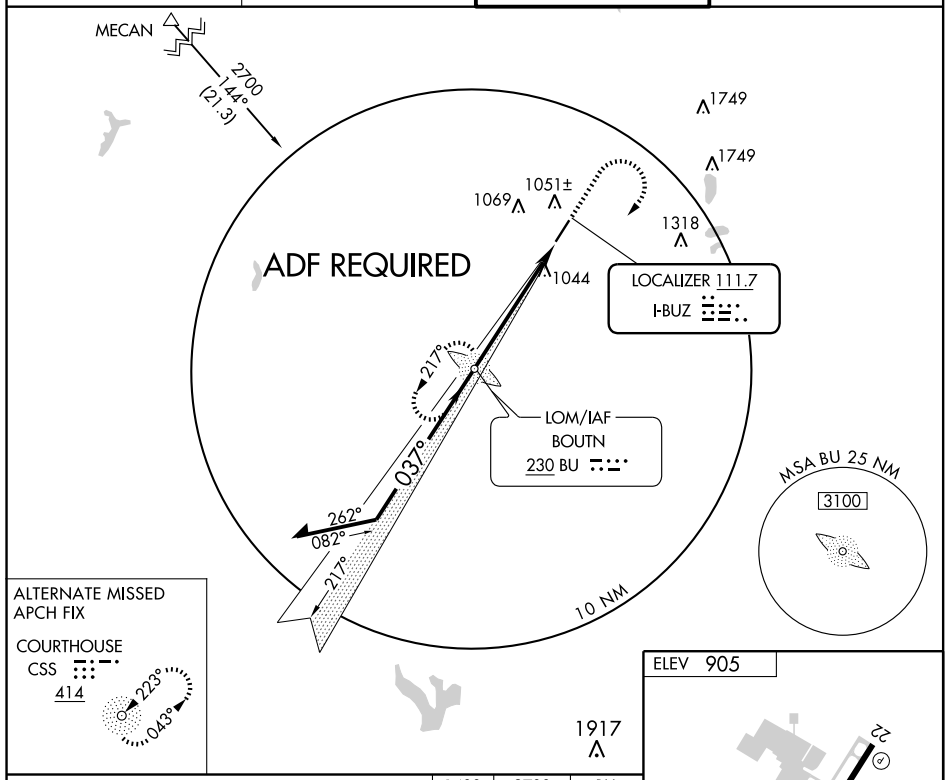
ILS or LOC RWY 4
COLUMBUS/BOLTON FIELD (TZR)

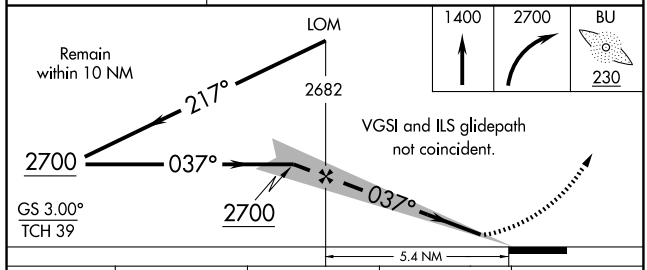
ADF Required. When local altimeter setting not received use Port Columbus altimeter setting and increase DA to 1147 and all MDA 60 feet.

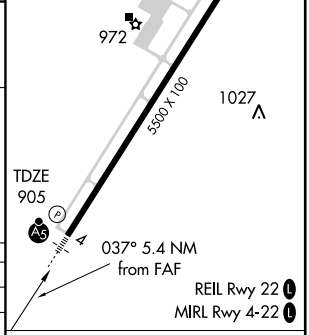
MALSR

MISSED APPROACH: Climb to 1400 then climbing right turn to 2700 direct BU LOM and hold.

AWOS-3	COLUMBUS APP CON	BOLTON TOWER ★	GND CON
135.925	132.3 279.6	128.1 (CTAF) L	121.8







CATEGORY	A	B	C	D
S-ILS 4	1105-½ 200 (200-½)			
S-LOC 4	1340-½ 435 (500-½)		1340-¾ 435 (500-¾)	1340-1 435 (500-1)
CIRCLING	1420-1 515 (600-1)		1420-1½ 515 (600-1½)	1460-2 555 (600-2)

FAF to MAP 5.4 NM

Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48

EC-2, 14 JAN 2010 to 11 FEB 2010

LOM BU	APP CRS	Rwy ldg	5500
230	038°	TDZE	905
		Apt Elev	905

NDB RWY 4

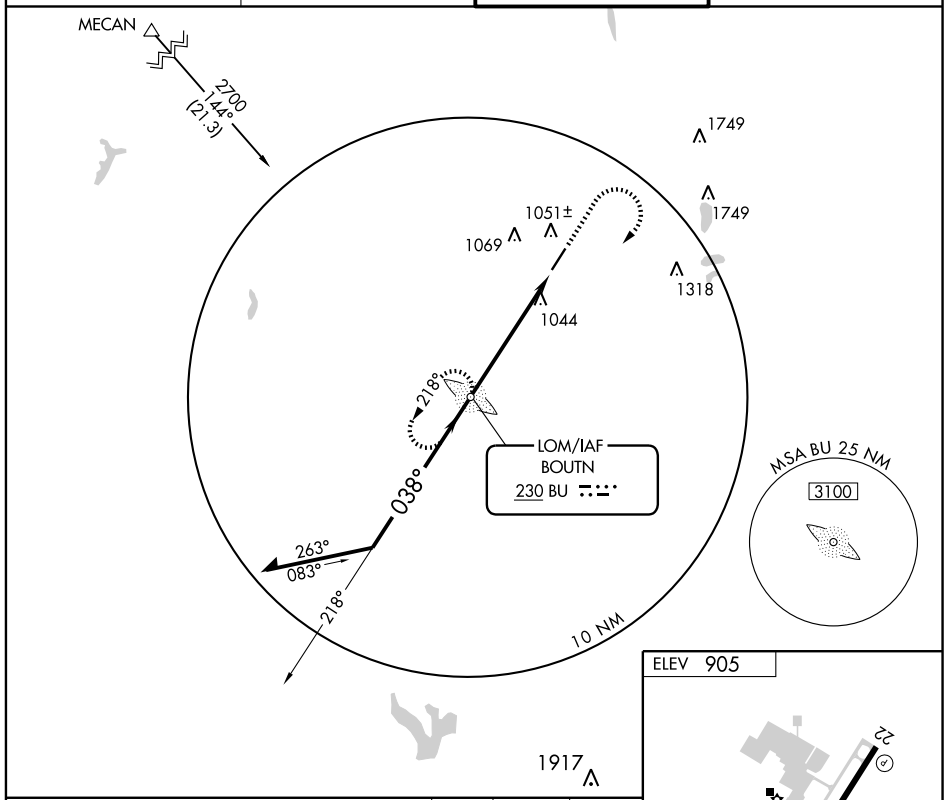
COLUMBUS/BOLTON FIELD (TZR)

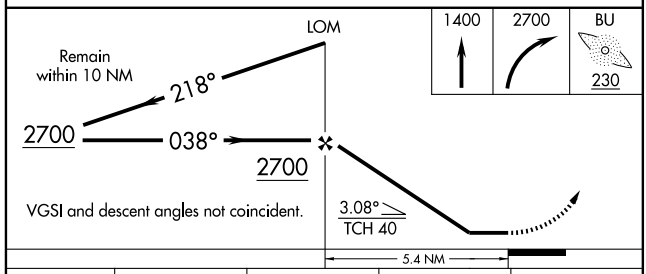
When local altimeter setting not received use Port Columbus altimeter setting and increase all MDA 60 feet and increase S-4 Cat C/D visibility ¼ mile.

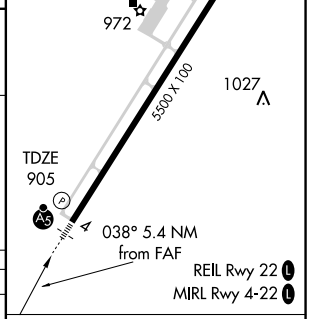
MALSR

MISSED APPROACH: Climb to 1400 then climbing right turn to 2700 direct BU LOM and hold.

AWOS-3	COLUMBUS APP CON	BOLTON TOWER ★	GND CON
135.925	132.3 279.6	128.1 (CTAF) L	121.8







CATEGORY	A	B	C	D
S-4	1400- ¾ 495 (500-¾)			1400-1¼ 495 (500-1¼)
CIRCLING	1420-1 515 (600-1)		1420-1½ 515 (600-1½)	1460-2 555 (600-2)

FAF to MAP 5.4 NM

Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48

EC-2, 14 JAN 2010 to 11 FEB 2010

WAAS CH 90505 W04A	APP CRS 037°	Rwy ldg 5500 TDZE 905 Apt Elev 905

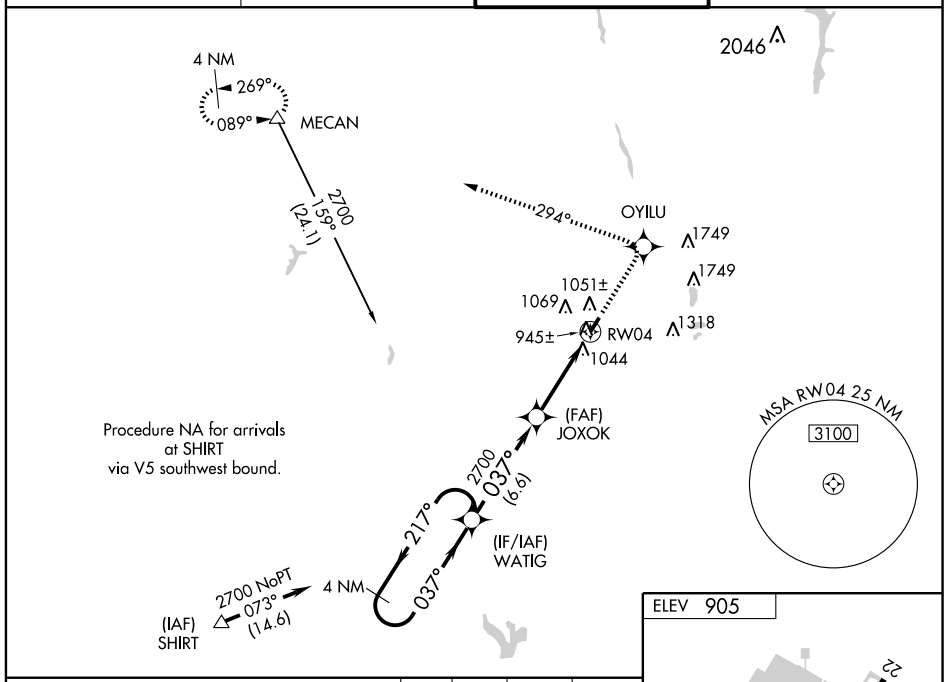
RNAV (GPS) RWY 4
COLUMBUS/BOLTON FIELD (TZR)

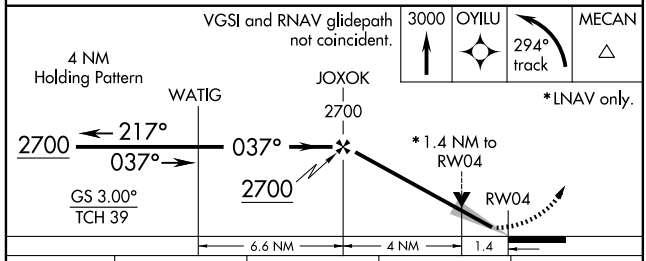
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Port Columbus altimeter setting and increase all DA 42 feet and all MDA 60 feet. Increase LNAV/VNAV visibility ¼ mile Cats A/B/C, LNAV Cat C/D ¼ mile. Baro-VNAV and VDP NA when using Port Columbus altimeter setting. For inoperative MALSR increase LNAV/VNAV Cat D visibility to 1.

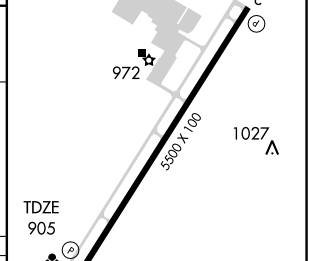
MALSR

MISSED APPROACH: Climb to 3000 direct OYILU and left turn via 294° track to MECAN and hold..

AWOS-3	COLUMBUS APP CON	BOLTON TOWER ★	GND CON
135.925	132.3 279.6	128.1 (CTAF) L	121.8







CATEGORY	A	B	C	D
LPV DA	1105-½ 200 (200-½)			
LNAV/VNAV DA	1195-½ 290 (300-½)			1195-¾ 290 (300-¾)
LNAV MDA	1360-½ 455 (500-½)		1360-¾ 455 (500-¾)	1360-1 455 (500-1)
CIRCLING	1420-1 515 (600-1)		1420-1½ 515 (600-1½)	1460-2 555 (600-2)

EC-2, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	4099
224°	TDZE	979
	Apt Elev	979

GPS RWY 22

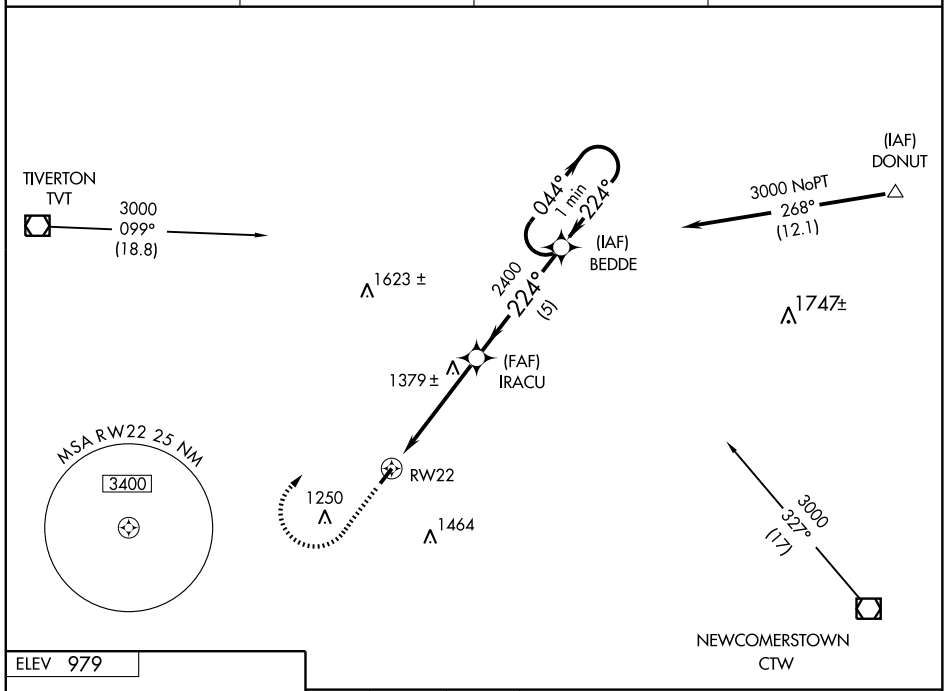
COSHOCTON/RICHARD DOWNING (I40)

Obtain local altimeter setting on CTAF; when not received, use Zanesville altimeter setting.

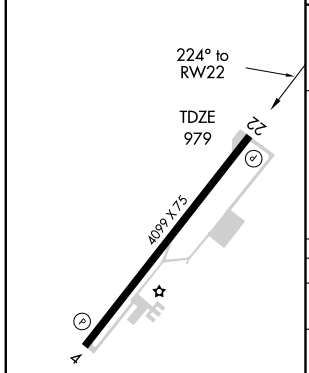
NA

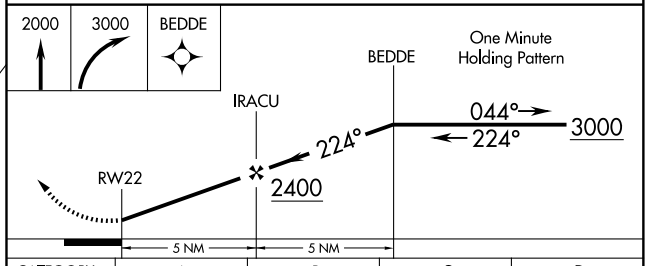
MISSED APPROACH: Climb to 2000, then climbing right turn to 3000 direct BEDDE WP and hold.

AWOS-3	INDIANAPOLIS CENTER	UNICOM	
118.875	124.45 370.9	123.0 (CTAF)	122.9 L



ELEV 979





CATEGORY	A	B	C	D
S-22	1640-1	661 (700-1)	1640-1¾ 661 (700-1¾)	1640-2 661 (700-2)
CIRCLING	1640-1	661 (700-1)	1640-1¾ 661 (700-1¾)	1820-2¾ 841 (900-2¾)
ZANESVILLE ALTIMETER SETTING MINIMUMS				
S-22	1700-1	721 (800-1)	1700-2 721 (800-2)	1700-2¼ 721 (800-2¼)
CIRCLING	1700-1	721 (800-1)	1700-2 721 (800-2)	1880-3 901 (1000-3)

REIL Rwy 22
MIRL Rwy 4-22 L

VOR/DME ZZV 111.4 Chan 51	APP CRS 011°	Rwy ldg N/A TDZE N/A Apt Elev 979

VOR or GPS-A

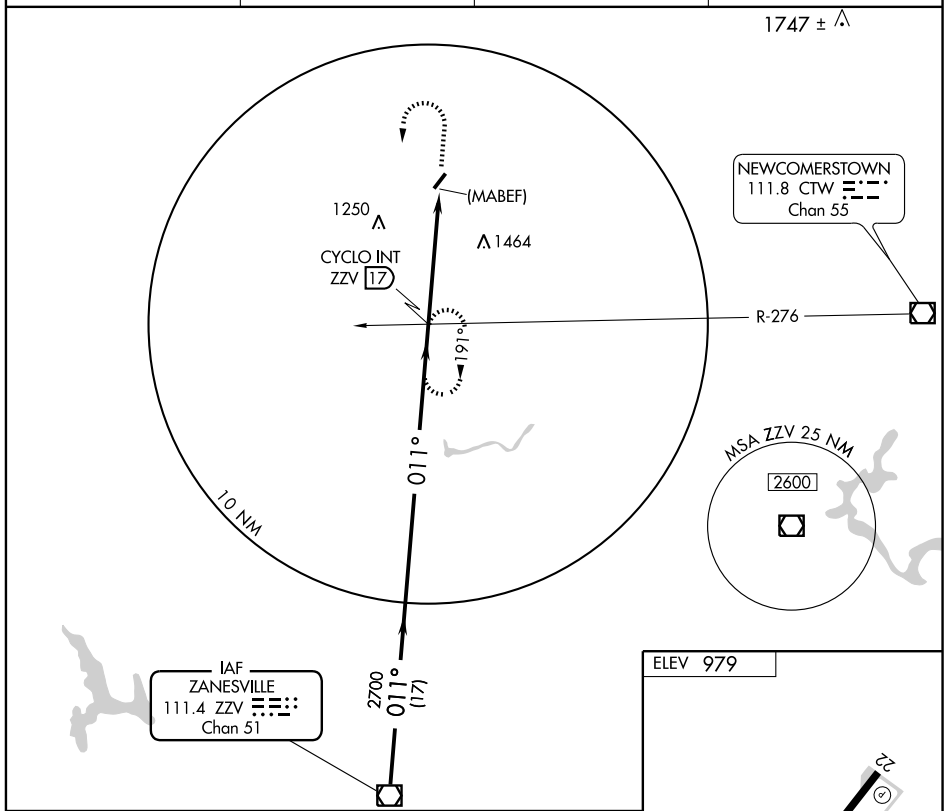
COSHOCTON/ RICHARD DOWNING (I40)

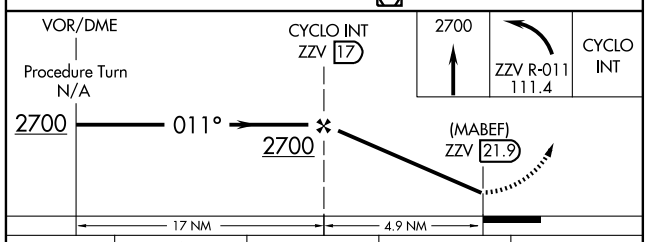
Obtain local altimeter setting on CTAF; when not recieved, use Zanesville altimeter setting.

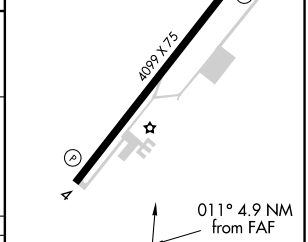
NA

MISSED APPROACH: Climb to 2700 then left turn via ZZV R-011 to CYCLO Int and hold.

AWOS-3	INDIANAPOLIS CENTER	UNICOM	
118.875	124.45 370.9	123.0 (CTAF)	122.9 L







CATEGORY	A	B	C	D
CIRCLING	1720-1 741 (800-1)	1720-1¼ 741 (800-1¼)	1720-2¼ 741 (800-2¼)	1720-2½ 741 (800-2½)
ZANESVILLE ALTIMETER SETTING MINIMUMS				
CIRCLING	1780-1 801 (900-1)	1780-1¼ 801 (900-1¼)	1780-2¼ 801 (900-2¼)	1780-2½ 801 (900-2½)

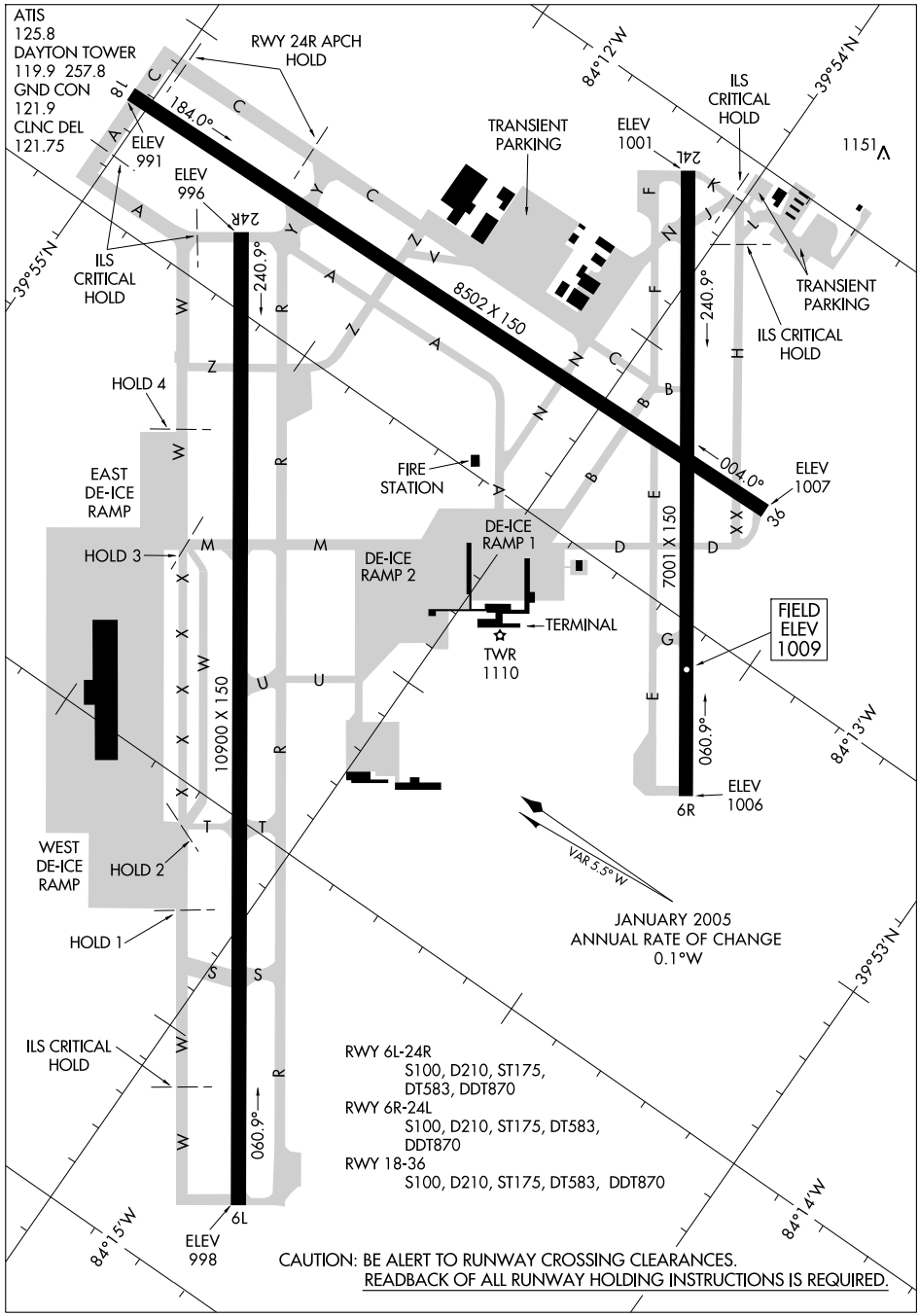
FAF to MAP 4.9 NM

Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38

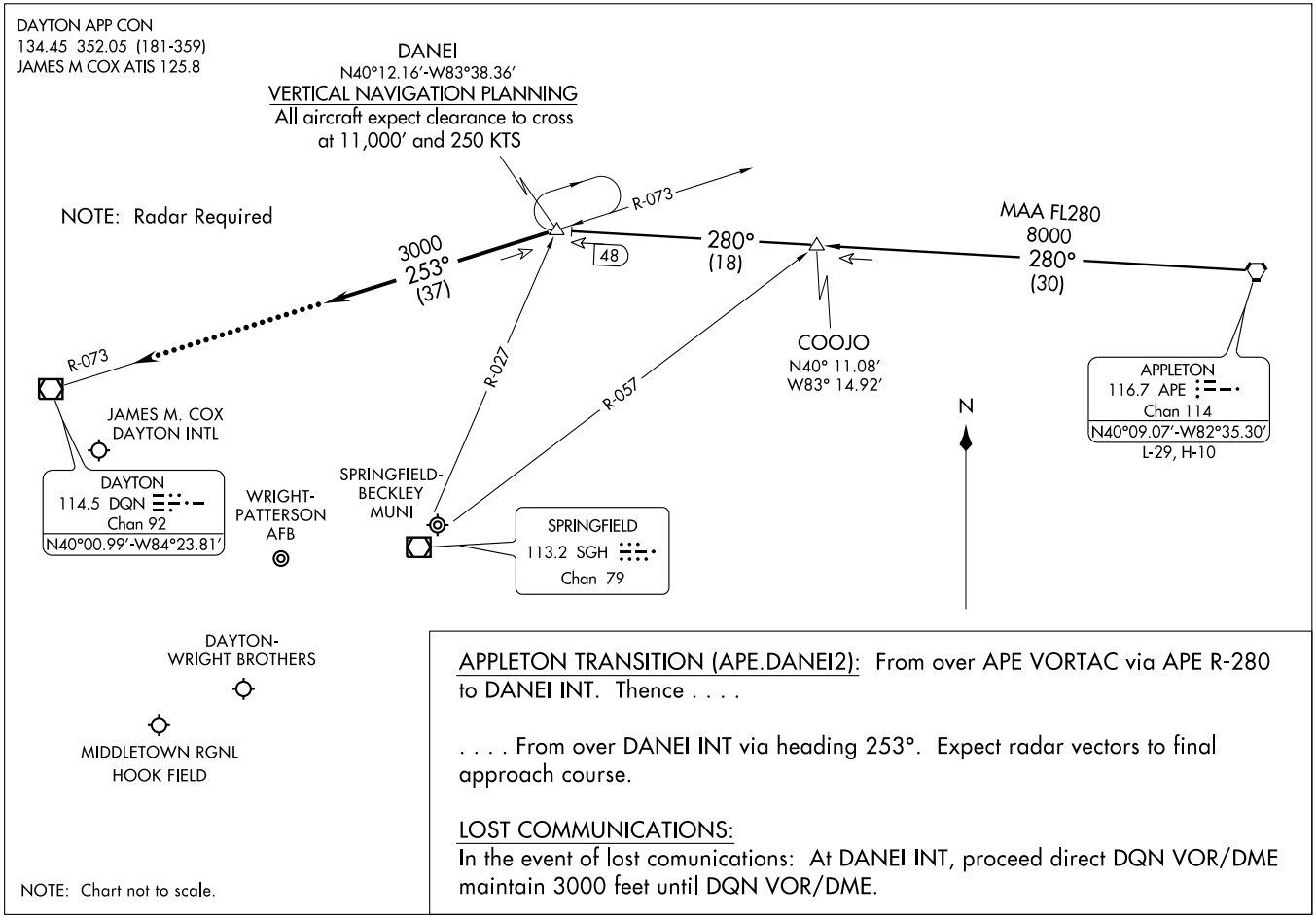
AIRPORT DIAGRAM

AL-107 (FAA)

DAYTON / JAMES M. COX-DAYTON INTL (DAY)
DAYTON, OHIO



EC-2, 14 JAN 2010 to 11 FEB 2010


DAYTON APP CON
134.45 352.05 (181-359)
JAMES M COX ATIS 125.8
DANEI
N40°12.16′-W83°38.36′
VERTICAL NAVIGATION PLANNING
All aircraft expect clearance to cross
at 11,000′ and 250 KTS
NOTE: Radar Required
R-073
3000
253°
(37)
48
280°
(18)
MAA FL280
8000
280°
(30)
R-073
R-027
R-057
COOJO
N40° 11.08′
W83° 14.92′
N
APPLETON
116.7 APE
Chan 114
N40°09.07′-W82°35.30′
L-29, H-10
JAMES M. COX
DAYTON INTL
DAYTON
114.5 DQN
Chan 92
N40°00.99′-W84°23.81′
WRIGHT-
PATTERSON
AFB
SPRINGFIELD-
BECKLEY
MUNI
SPRINGFIELD
113.2 SGH
Chan 79
DAYTON-
WRIGHT BROTHERS
MIDDLETOWN RGNL
HOOK FIELD
APPLETON TRANSITION (APE.DANEI2): From over APE VORTAC via APE R-280 to DANEI INT. Thence . . . .
. . . . From over DANEI INT via heading 253°. Expect radar vectors to final approach course.
LOST COMMUNICATIONS:
In the event of lost comunications: At DANEI INT, proceed direct DQN VOR/DME maintain 3000 feet until DQN VOR/DME.
NOTE: Chart not to scale.
(DANEI.DANEI2) 09295
DANEI TWO ARRIVAL
ST-107 (FAA)
DAYTON, OHIO

DAYTON FOUR DEPARTURE

SL-107 (FAA) DAYTON/ JAMES M. COX DAYTON INTL (DAY)
DAYTON, OHIO

ATIS
125.8
CLNC DEL
121.75
GND CON
121.9
DAYTON TOWER
119.9 257.8

PIONS
N41°39.23′
W84°28.92′
L-28

KLINE
N41°15.81′
W84°11.64′
L-28

REELS
N41°08.02′
W83°03.78′
L-28-29

WAKEM
N41°17.11′
W82°27.51′

DRYER
113.6 DJB
Chan 83
N41°21.49′
W82°09.72′
L-30, H-10

FORT WAYNE
117.8 FWA
Chan 125
N40°58.74′-W85°11.28′
L-27, H-5-10

N

ROSEWOOD
117.5 ROD
Chan 122
N40°17.27′-W84°02.59″
L-27, H-10

MUNCIE
114.4 MIE
Chan 91
N40°14.24′
W85°23.64′
L-27

DAYTON
114.5 DQN
Chan 92
N40°00.99′-W84°23.81′
L-27, H-10

APPLETON
116.7 APE
Chan 114
N40°09.07-W82°35.30′
L-29, H-10

R-260

YELLOW BUD
112.5 XUB
N39°31.61′-W82°58.67′
L-29

BRICKYARD
116.3 VHP
Chan 110
N39°48.88′-W86°22.05′
L-27, H-5-10

R-004

CINCINNATI
117.3 CVG
Chan 120
N39°00.96′
W84°42.20′
L-26-27, H-10

NOTE: Chart not to scale.

DEPARTURE ROUTE DESCRIPTION

T

TAKE-OFF ALL RUNWAYS: Climb on runway heading or as assigned for vectors to join filed route. All aircraft maintain 5000 feet or filed altitude if lower. Appropriate departure control frequency will be assigned by ATC. Expect clearance to requested altitude/flight level 10 minutes after departure. Turbojet aircraft filed over CVG VORTAC, maintain 250 knots until advised by ATC, expect vectors to intercept CVG R-004. Aircraft filed over APE VORTAC, expect vectors to intercept the APE R-260.

LOC I-ATD	APP CRS	Rwy ldg	10900
108.9	061°	TDZE	998
		Apt Elev	1009

ILS or LOC RWY 6L

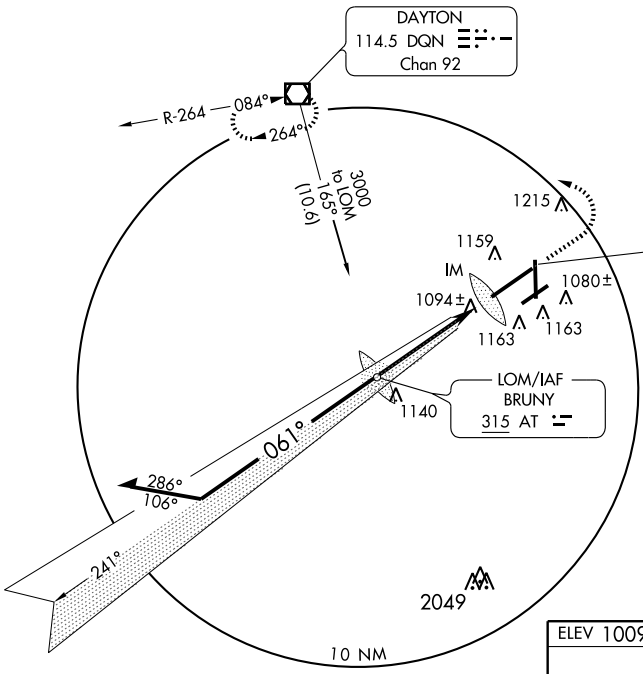
DAYTON/JAMES M. COX DAYTON INTL (DAY)

ASR

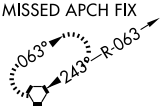
ALSF-2

MISSED APPROACH: Climb to 2000 then climbing left turn to 3000 direct DQN VOR/DME and hold.

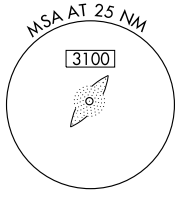
ATIS	DAYTON APP CON	DAYTON TOWER	GND CON	CLNC DEL
125.8	134.45 352.05	119.9 257.8	121.9	121.75



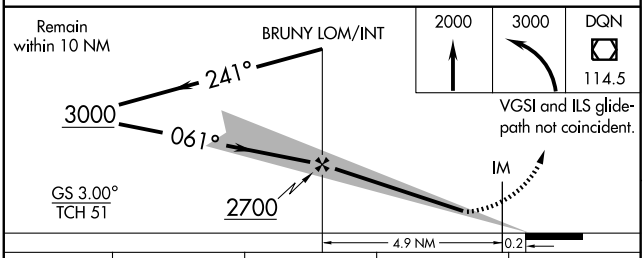
ALTERNATE MISSED APCH FIX



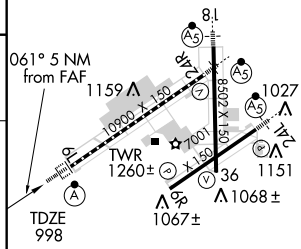
ROSEWOOD
117.5 ROD
Chan 122



ADF or RADAR REQUIRED



ELEV 1009



HIRL all Rwys
TDZ/CL Rwy 6L
REIL Rwys 6R and 36

CATEGORY	A	B	C	D
S-ILS 6L	1198/18 200 (200-½)			
S-LOC 6L	1380/24 382 (400-½)			1380/40 382 (400-¾)
CIRCLING	1560-1 551 (600-1)		1560-1½ 551 (600-1½)	1560-2 551 (600-2)

FAF to MAP 5 NM

Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

EC-2. 14 JAN 2010 to 11 FEB 2010

LOC I-DAY	APP CRS	Rwy ldg	8502
108.3	183°	TDZE	995
		Apt Elev	1009

ILS or LOC RWY 18

DAYTON/JAMES M. COX DAYTON INTL (DAY)

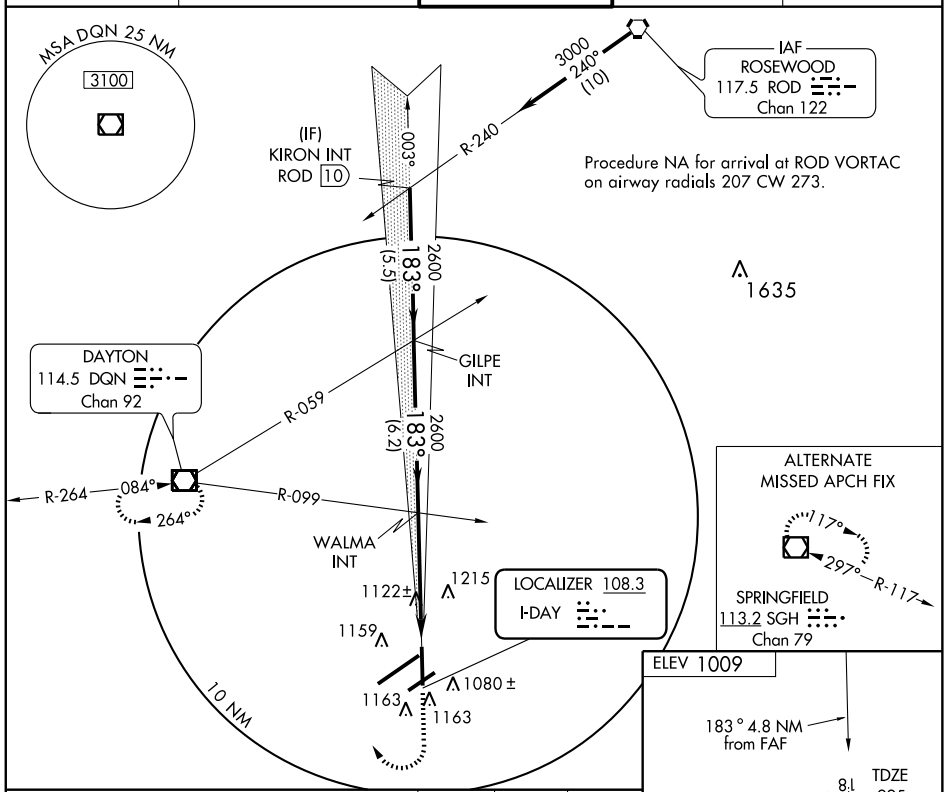
ASR

* RVR 1800 authorized with the use of FD or AP or HUD to DA.

MALSR

MISSED APPROACH: Climb to 3100 then right turn direct DQN VOR/DME and hold.

ATIS	DAYTON APP CON	DAYTON TOWER	GND CON	CLNC DEL
125.8	134.45 352.05	119.9 257.8	121.9	121.75



CATEGORY	A	B	C	D
S-ILS 18	*1195/24 200 (200-½)			
S-LOC 18	1380/24 385 (400-½)			1380/40 385 (400-¾)
CIRCLING	1560-1 551 (600-1)		1560-1½ 551 (600-1½)	1560-2 551 (600-2)

HIRL all Rwys
TDZ/CL Rwy 6L
REIL Rwys 6R and 36

FAF to MAP 4.8 NM					
Knots	60	90	120	150	180
Min:Sec	4:48	3:12	2:24	1:55	1:36

EC-2, 14 JAN 2010 to 11 FEB 2010

LOC I-EGK	APP CRS	Rwy ldg	7001
110.3	239°	TDZE	1006
		Apt Elev	1009

ILS or LOC RWY 24L

DAYTON/JAMES M. COX DAYTON INTL (DAY)

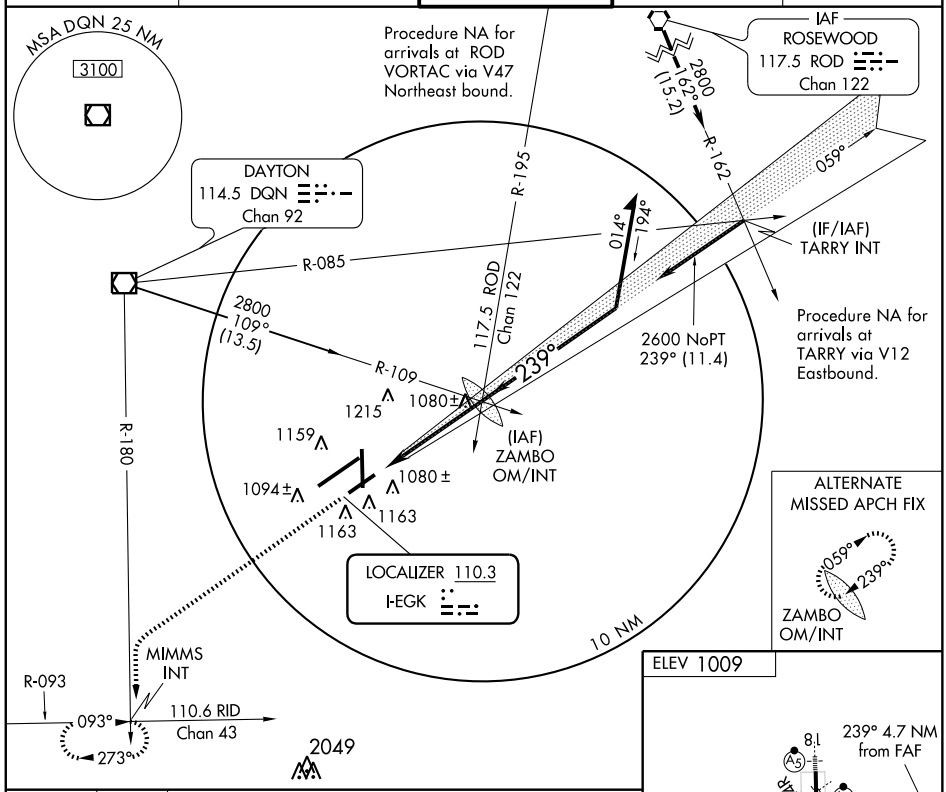
ASR

*RVR 1800 authorized with the use of FD or AP or HUD to DA.

MALSR

MISSED APPROACH: Climb to 3000 via heading 239° and DQN VOR/DME R-180 to MIMMS Int and hold.

ATIS	DAYTON APP CON	DAYTON TOWER	GND CON	CLNC DEL
125.8	134.45 352.05	119.9 257.8	121.9	121.75



CATEGORY	A	B	C	D
S-ILS 24L	*1206/24 200 (200-½)			
S-LOC 24L	1500/24 494 (500-½)		1500/40 494 (500-¾)	1500/50 494 (500-1)
CIRCLING	1560-1 551 (600-1)		1560-1½ 551 (600-1½)	1560-2 551 (600-2)

HIRL all Rwys
TDZ/CL Rwy 6L
REIL Rwys 6R and 36

FAF to MAP 4.7 NM					
Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

EC-2. 14 JAN 2010 to 11 FEB 2010

LOC I-VUQ	APP CRS	Rwy ldg	10900
111.9	239°	TDZE	997
		Apt Elev	1009

ILS or LOC RWY 24R

DAYTON/JAMES M. COX DAYTON INTL (DAY)

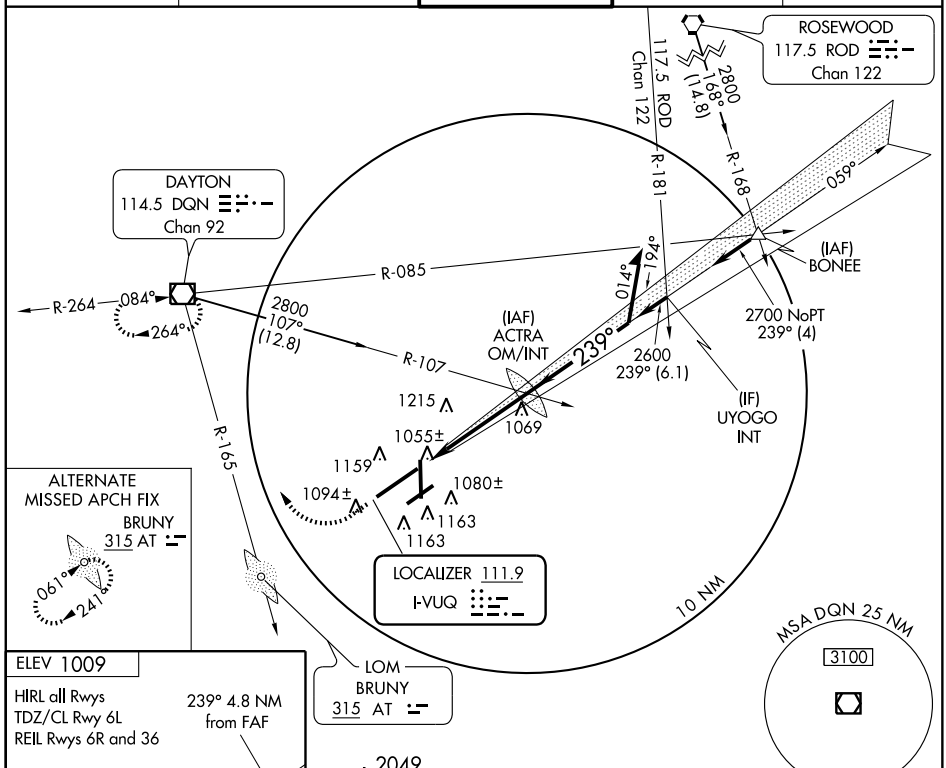
ASR

*RVR 1800 authorized with the use of FD or AP or HUD to DA.

MALSR

MISSED APPROACH: Climb to 3000 then right turn direct DQN VOR/DME and hold.

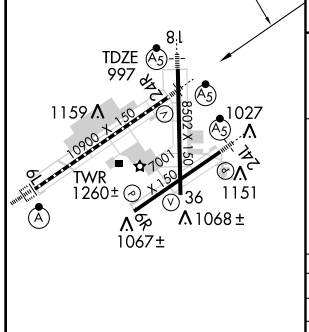
ATIS	DAYTON APP CON	DAYTON TOWER	GND CON	CLNC DEL
125.8	134.45 352.05	119.9 257.8	121.9	121.75

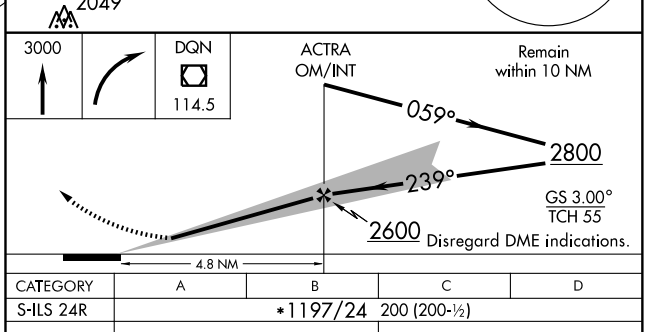


ELEV 1009

HIRL all Rwys
TDZ/CL Rwy 6L
REIL Rwys 6R and 36

239° 4.8 NM from FAF





FAF to MAP 4.8 NM					
Knots	60	90	120	150	180
Min:Sec	4:48	3:12	2:24	1:55	1:36

CATEGORY	A	B	C	D
S-ILS 24R	*1197/24 200 (200-½)			
S-LOC 24R	1400/24 403 (400-½)		1400/40 403 (400-¾)	
CIRCLING	1560-1 551 (600-1)		1560-1½ 551 (600-1½)	1560-2 551 (600-2)

EC-2, 14 JAN 2010 to 11 FEB 2010

LOC I-ATD	APP CRS	Rwy ldg	10900
108.9	061°	TDZE	998
		Apt Elev	1009

ILS RWY 6L (CAT II)

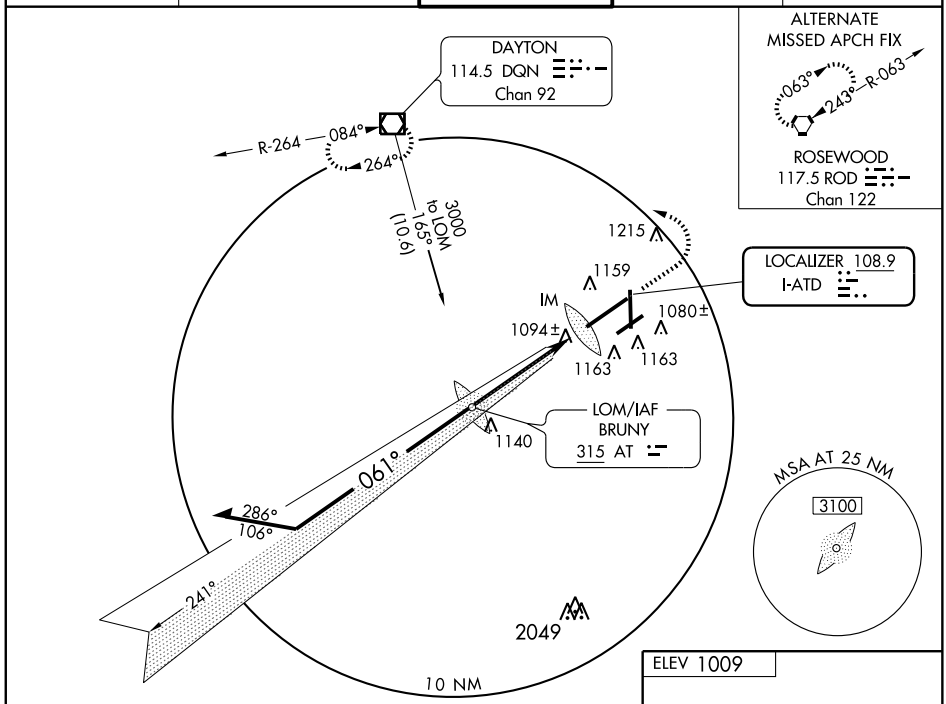
DAYTON/JAMES M. COX DAYTON INTL (DAY)

ASR

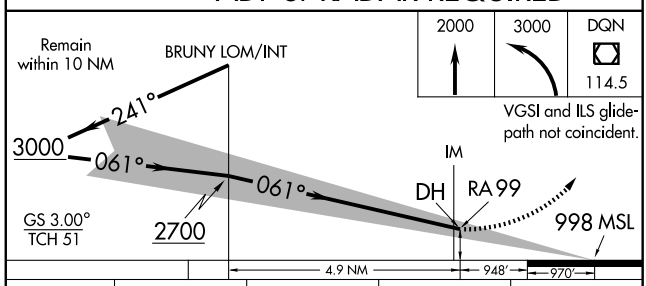
ALSF-2

MISSED APPROACH: Climb to 2000 then climbing left turn to 3000 direct DQN VOR/DME and hold.

ATIS	DAYTON APP CON	DAYTON TOWER	GND CON	CLNC DEL
125.8	134.45 352.05	119.9 257.8	121.9	121.75



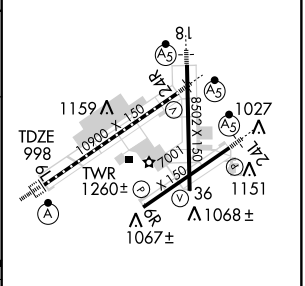
ADF or RADAR REQUIRED



CATEGORY	A	B	C	D
S-ILS 6L	RA 99/12		100 DA 1098	

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

ELEV 1009



HIRL all Rwys
TDZ/CL Rwy 6L
REIL Rwys 6R and 36

LOC I-ATD	APP CRS	Rwy ldg	10900
108.9	061°	TDZE	998
		Apt Elev	1009

ILS RWY 6L (CAT III)

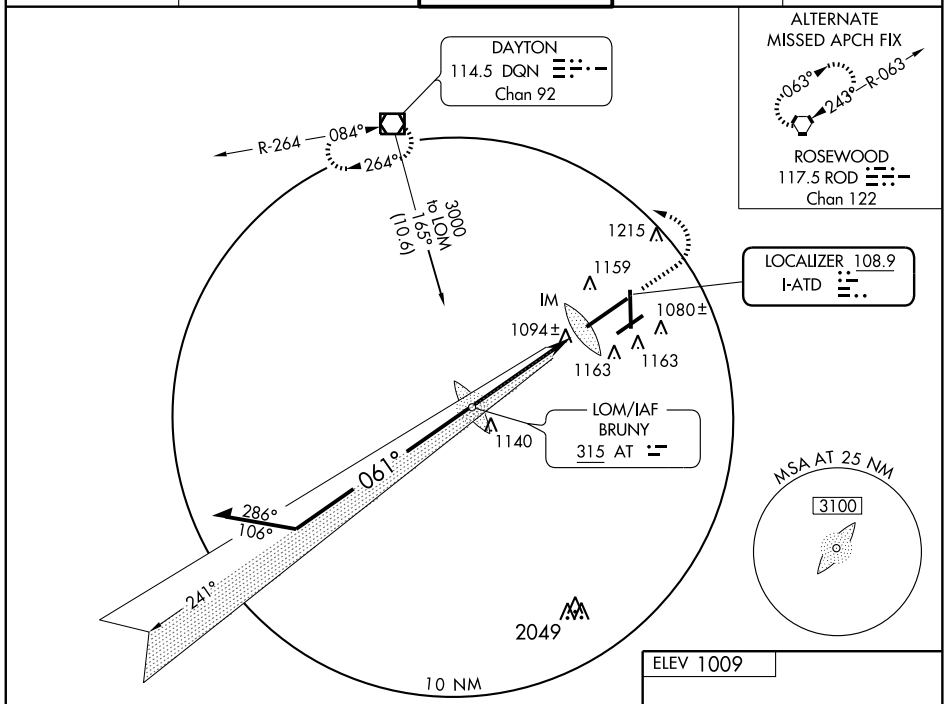
DAYTON/JAMES M. COX DAYTON INTL (DAY)

ASR

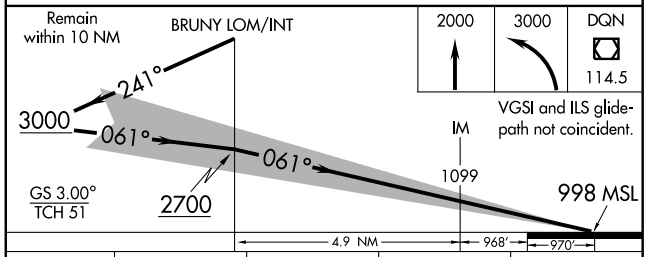
ALSF-2

MISSED APPROACH: Climb to 2000 then climbing left turn to 3000 direct DQN VOR/DME and hold.

ATIS	DAYTON APP CON	DAYTON TOWER	GND CON	CLNC DEL
125.8	134.45 352.05	119.9 257.8	121.9	121.75



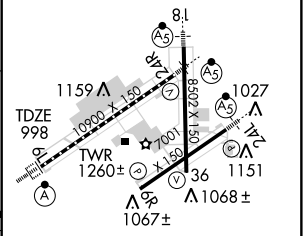
ADF or RADAR REQUIRED



CATEGORY	A	B	C	D
S-ILS 6L		CAT IIIa	RVR 07	
S-ILS 6L		CAT IIIb	RVR 06	
S-ILS 6L		CAT IIIc	NA	

CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

ELEV 1009



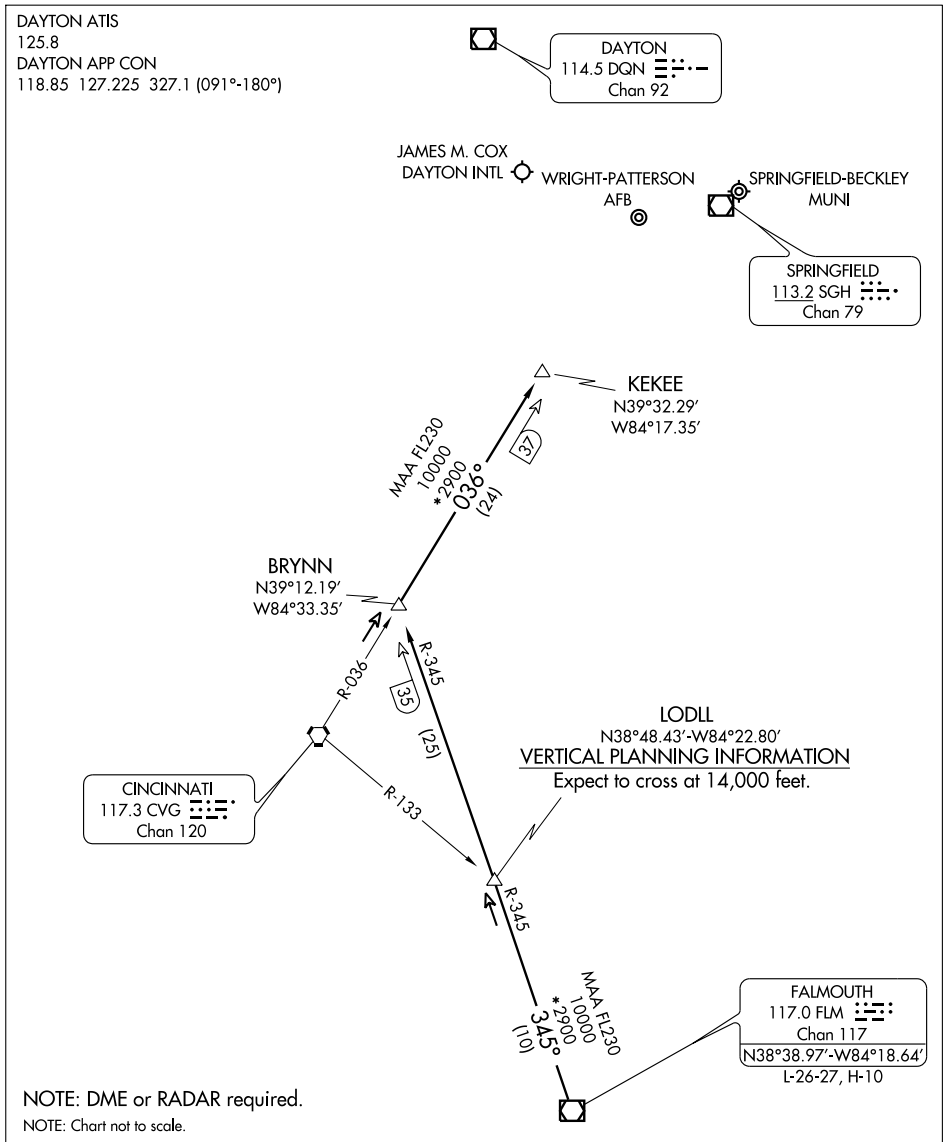
HIRL all Rwys
TDZ/CL Rwy 6L
REIL Rwys 6R and 36

(KEKEE.KEKEE3) 09183

KEKEE THREE ARRIVAL

ST-107 (FAA)

DAYTON, OHIO



FALMOUTH TRANSITION (FLM.KEKEE3): From over FLM VOR/DME via FLM R-345 to BRYNN INT, then via CVG R-036 to KEKEE INT. Thence. . . .

. . . . From over KEKEE INT: Expect radar vectors to join final approach course.

EC-2, 14 JAN 2010 to 11 FEB 2010

LOM AT	APP CRS	Rwy ldg	7001
315	069°	TDZE	1007
		Apt Elev	1009

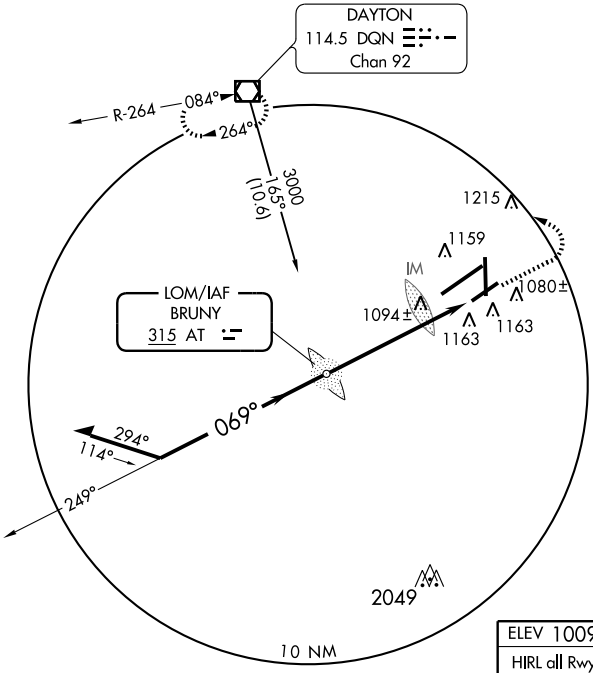
NDB RWY 6R

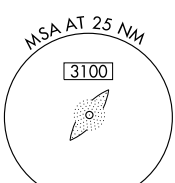
DAYTON/JAMES M. COX DAYTON INTL (DAY)

ASR Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 2000 then climbing left turn to 3000 direct DQN VOR/DME and hold.

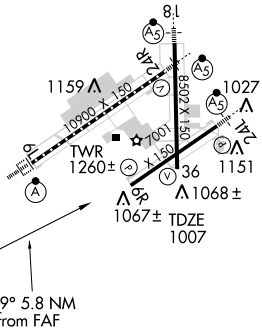
ATIS	DAYTON APP CON	DAYTON TOWER	GND CON	CLNC DEL
125.8	134.45 352.05	119.9 257.8	121.9	121.75

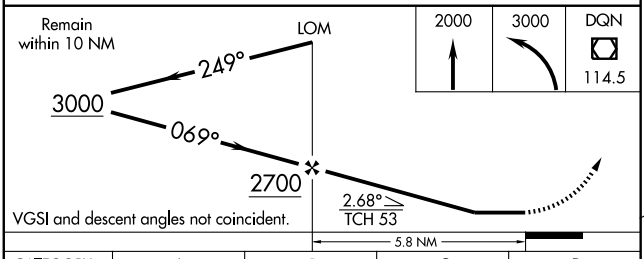




ELEV 1009

HIRL all Rwys
TDZ/CL Rwy 6L
REIL Rwys 6R and 36





CATEGORY	A	B	C	D
S-6R	1540-1	533 (600-1)	1540-1½ 533 (600-1½)	1540-1¾ 533 (600-1¾)
CIRCLING	1560-1	551 (600-1)	1560-1½ 551 (600-1½)	1560-2 551 (600-2)

FAF to MAP 5.8 NM

Knots	60	90	120	150	180
Min:Sec	5:48	3:52	2:54	2:19	1:56

EC-2. 14 JAN 2010 to 11 FEB 2010

WAAS CH 42913 W06A	APP CRS 059°	Rwy ldg 10900 TDZE 998 Apt Elev 1009

RNAV (GPS) RWY 6L

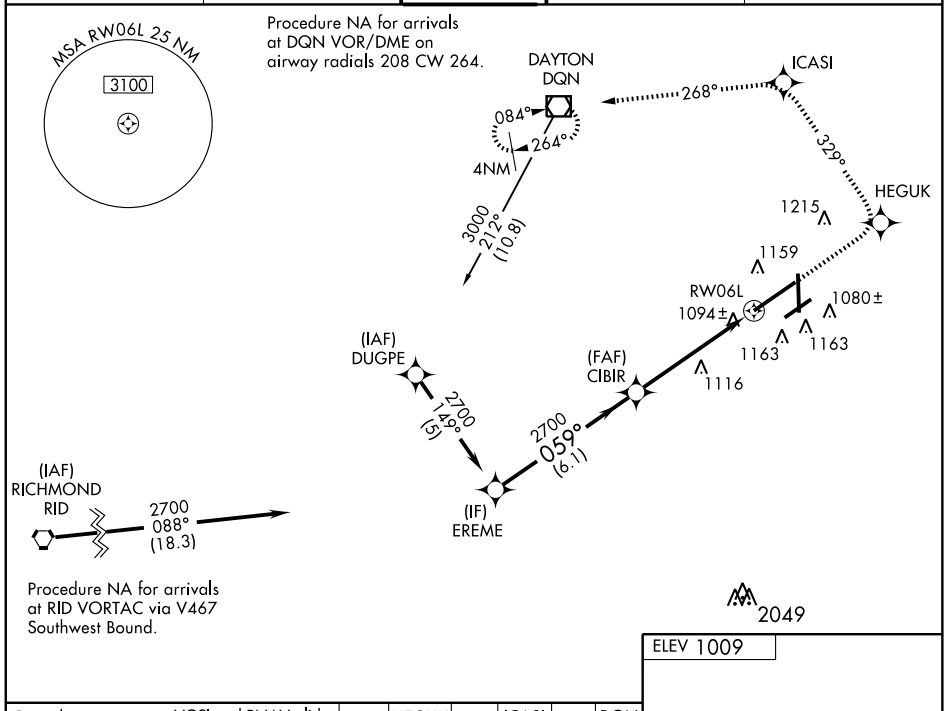
DAYTON/JAMES M. COX DAYTON INTL (DAY)

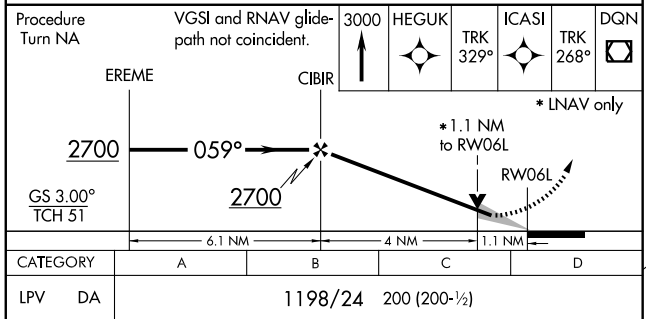
ASR For inoperative ALSF-2, increase LNAV Cat D visibility to RVR 6000. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 47°C (116°F). DME/DME RNP-0.3 NA.

ALSF-2

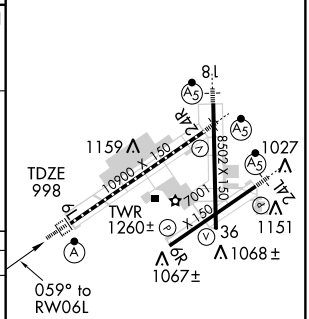
MISSED APPROACH: Climb to 3000 direct HEGUK and via track 329° to ICASI and via track 268° to DQN VOR/DME and hold.

ATIS	DAYTON APP CON	DAYTON TOWER	GND CON	CLNC DEL
125.8	134.45 352.05	119.9 257.8	121.9	121.75





CATEGORY	A	B	C	D
LPV DA	1198/24 200 (200-½)			
LNAV/VNAV DA	1366/40 368 (400-¾)			
LNAV MDA	1420/24 422 (500-½)		1420/40 422 (500-¾)	1420/50 422 (500-1)
CIRCLING	1560-1 551 (600-1)		1560-1½ 551 (600-1½)	1560-2 551 (600-2)



HIRL all Rwys
TDZE/CL Rwy 6L
REIL Rwys 6R and 36

EC-2, 14 JAN 2010 to 11 FEB 2010

WAAS CH 90414 W06B	APP CRS 059°	Rwy ldg 7001 TDZE 1007 Apt Elev 1009

RNAV (GPS) RWY 6R

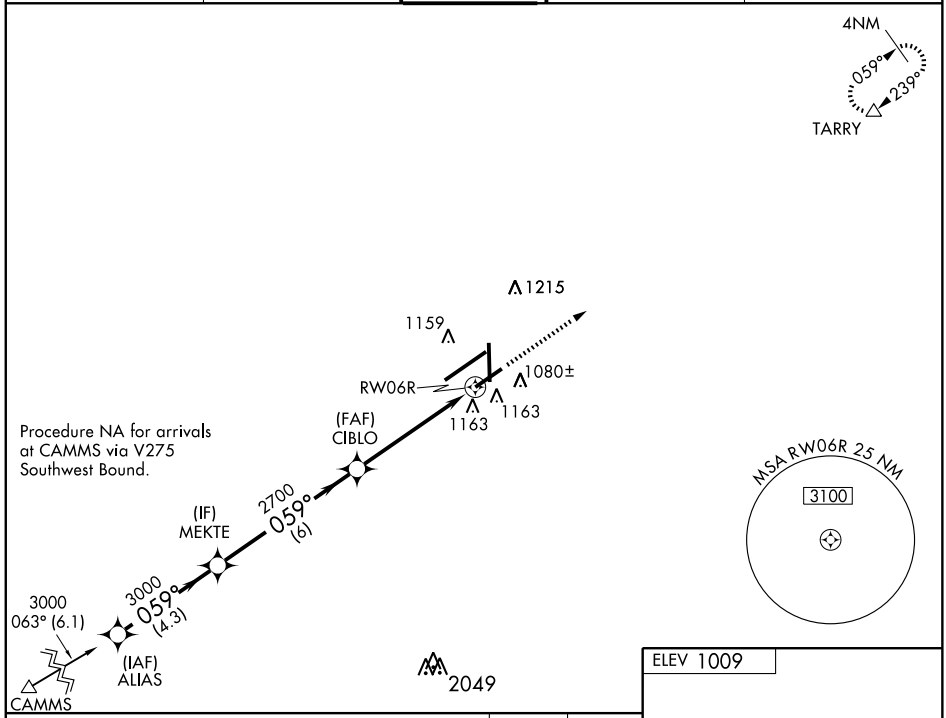
DAYTON/ JAMES M. COX DAYTON INTL (DAY)

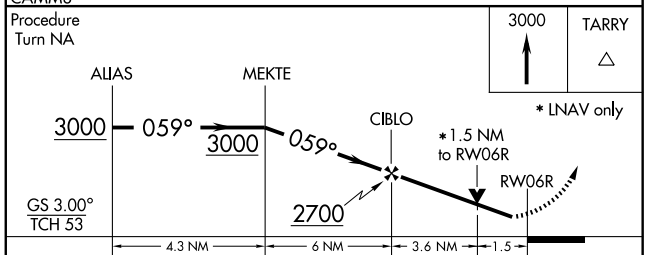
ASR

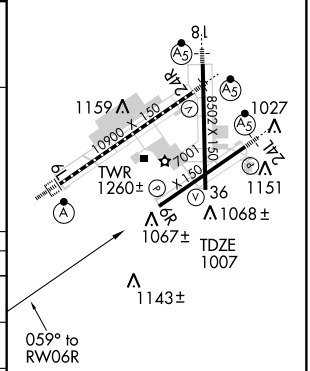
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 3000 direct TARRY and hold.

ATIS	DAYTON APP CON	DAYTON TOWER	GND CON	CLNC DEL
125.8	134.45 352.05	119.9 257.8	121.9	121.75







CATEGORY	A	B	C	D
LPV DA	1257-¾ 250 (300-¾)			
LNAV/VNAV DA	1494-1¾ 487 (500-1¾)			
LNAV MDA	1520-1 513 (600-1)		1520-1½ 513 (600-1½)	1520-1¾ 513 (600-1¾)
CIRCLING	1560-1 551 (600-1)		1560-1½ 551 (600-1½)	1560-2 551 (600-2)

HIRL all Rwys
TDZE/CL Rwy 6L
REIL Rwys 6R and 36

EC-2, 14 JAN 2010 to 11 FEB 2010

WAAS CH 86914 W18A	APP CRS 183°	Rwy ldg 8502 TDZE 995 Apt Elev 1009

RNAV (GPS) RWY 18

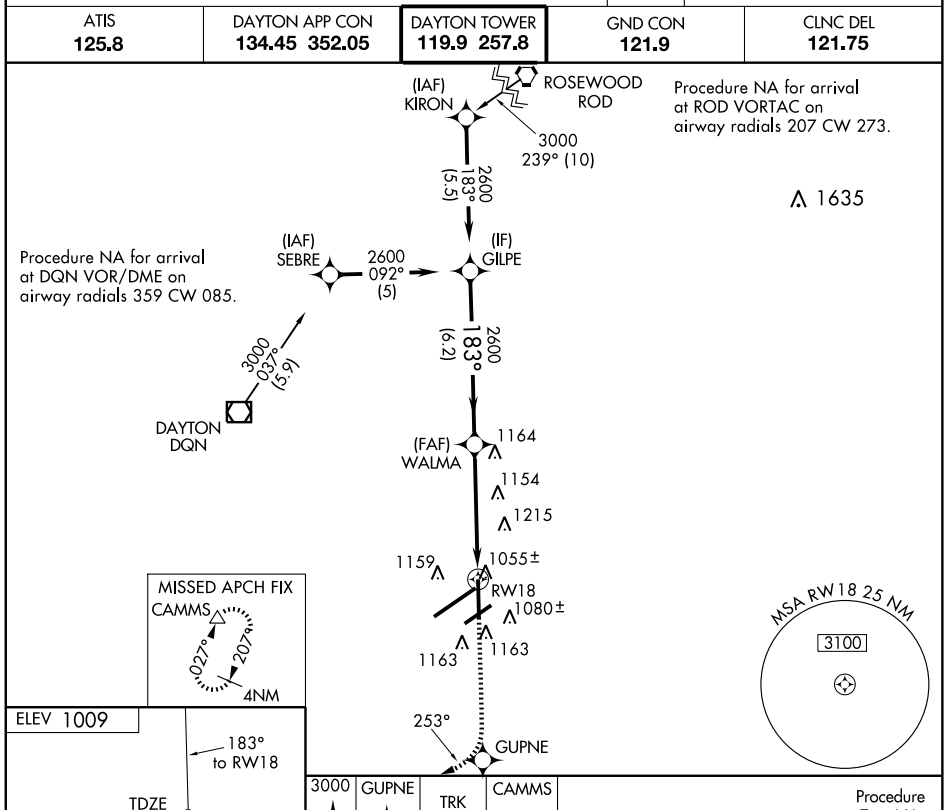
DAYTON/JAMES M. COX DAYTON INTL (DAY)

ASR: For inoperative MALSR, increase LNAV Cat D visibility to RVR 6000. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA.

MALSR

MISSED APPROACH: Climb to 3000 direct GUPNE and via track 253° to CAMMS and hold.

ATIS	DAYTON APP CON	DAYTON TOWER	GND CON	CLNC DEL
125.8	134.45 352.05	119.9 257.8	121.9	121.75



CATEGORY	A	B	C	D
LPV DA	1195/24 200 (200-½)			
LNAV/VNAV DA	1405/50 410 (400-1)			
LNAV MDA	1420/24 425 (500-½)		1420/40 425 (500-¾)	1420/50 425 (500-1)
CIRCLING	1560-1 551 (600-1)		1560-1½ 551 (600-1½)	1560-2 551 (600-2)

HIRL all Rwys
TDZ/CL Rwy 6L
REIL Rwys 6R and 36

EC-2, 14 JAN 2010 to 11 FEB 2010

WAAS CH 50414 W24A	APP CRS 239°	Rwy ldg 7001 TDZE 1006 Apt Elev 1009

RNAV (GPS) RWY 24L

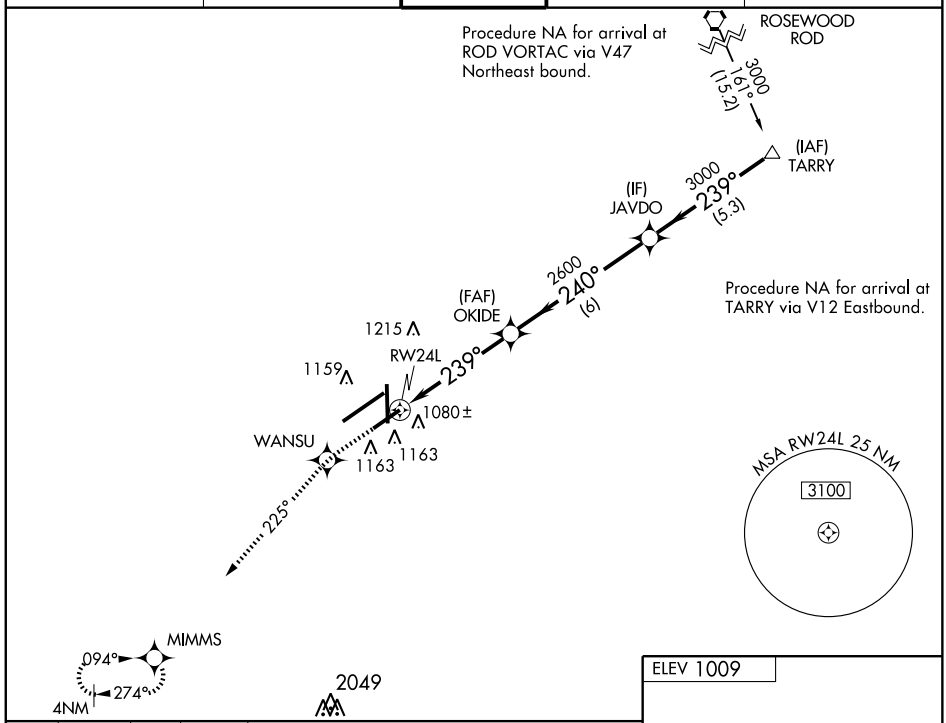
DAYTON/JAMES M. COX DAYTON INTL (DAY)

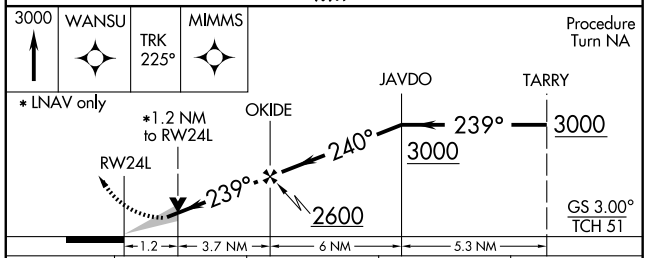
ASR: For inoperative MALSR, increase LNAV Cat D visibility to RVR 6000. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA.

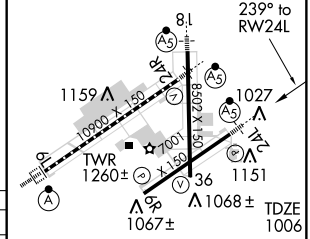
MALSR

MISSED APPROACH: Climb to 3000 direct WANSU and track 225° to MIMMS and hold.

ATIS	DAYTON APP CON	DAYTON TOWER	GND CON	CLNC DEL
125.8	134.45 352.05	119.9 257.8	121.9	121.75







CATEGORY	A	B	C	D
LPV DA	1206/24 200 (200-½)			
LNAV/VNAV DA	1401/50 395 (400-1)			
LNAV MDA	1420/24 414 (500-½)		1420/40 414 (500-¾)	1420/50 414 (500-1)
CIRCLING	1560-1 551 (600-1)		1560-1½ 551 (600-1½)	1560-2 551 (600-2)

HIRL all Rwys
TDZE/CL Rwy 6L
REIL Rwys 6R and 36

EC-2, 14 JAN 2010 to 11 FEB 2010

WAAS CH 66013 W24B	APP CRS 239°	Rwy ldg 10900 TDZE 997 Apt Elev 1009

RNAV (GPS) RWY 24R

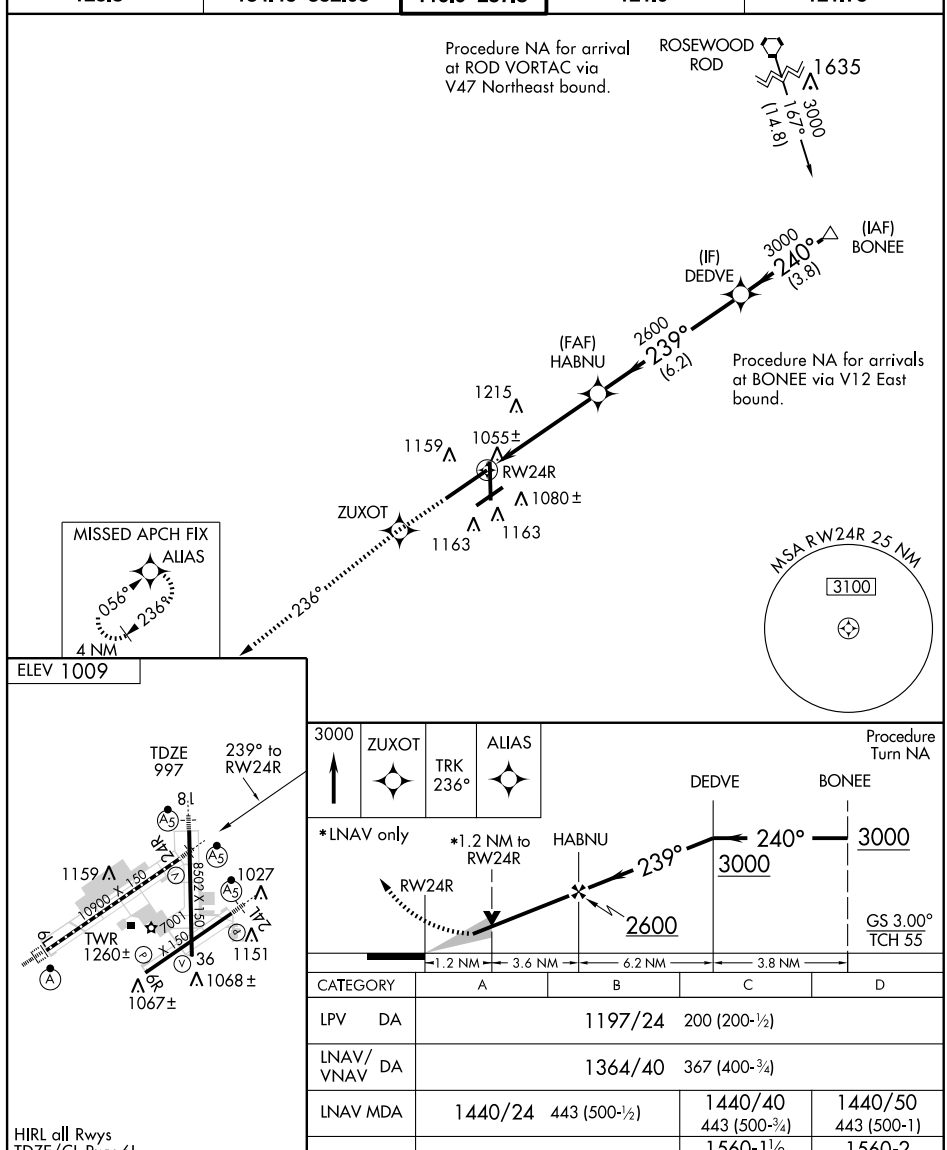
DAYTON/JAMES M. COX DAYTON INTL (DAY)

ASR: For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA.

MALSR

MISSED APPROACH: Climb to 3000 direct ZUXOT and via track 236° to ALIAS and hold.

ATIS	DAYTON APP CON	DAYTON TOWER	GND CON	CLNC DEL
125.8	134.45 352.05	119.9 257.8	121.9	121.75



CATEGORY	A	B	C	D
LPV DA	1197/24 200 (200-½)			
LNAV/VNAV DA	1364/40 367 (400-¾)			
LNAV MDA	1440/24 443 (500-½)		1440/40 443 (500-¾)	1440/50 443 (500-1)
CIRCLING	1560-1 551 (600-1)		1560-1½ 551 (600-1½)	1560-2 551 (600-2)

HIRL all Rwys
TDZE/CL Rwy 6L
REIL Rwys 6R and 36

APP CRS	Rwy ldg	8502
003°	TDZE	1008
	Apt Elev	1009

RNAV (GPS) RWY 36

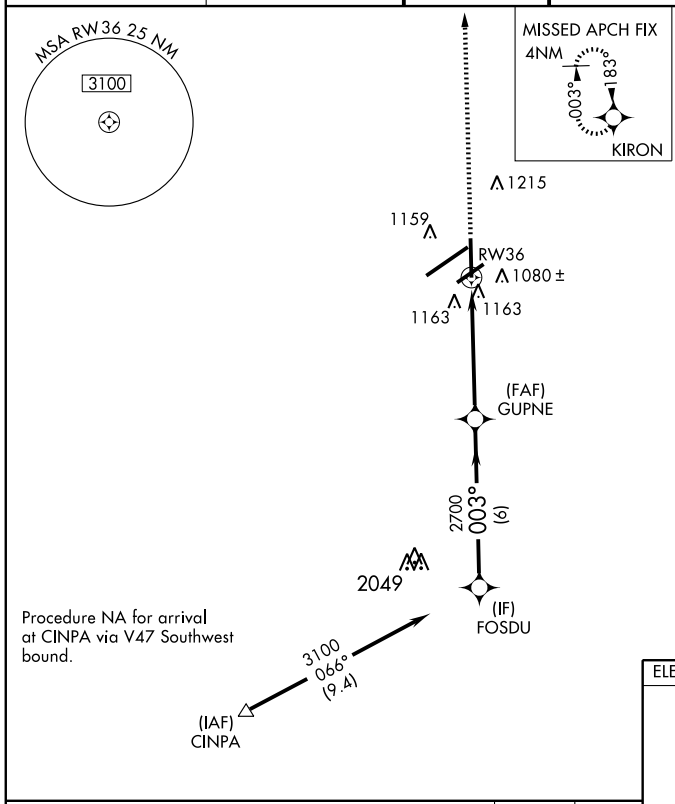
DAYTON/JAMES M. COX DAYTON INTL (DAY)

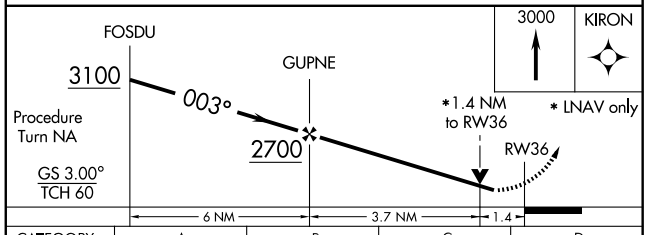
ASR

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

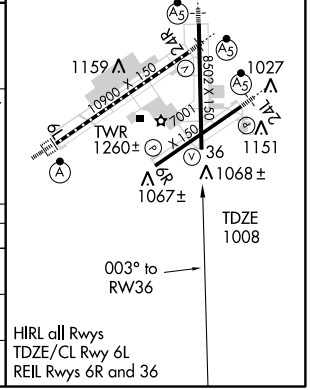
MISSED APPROACH: Climb to 3000 direct to KIRON and hold.

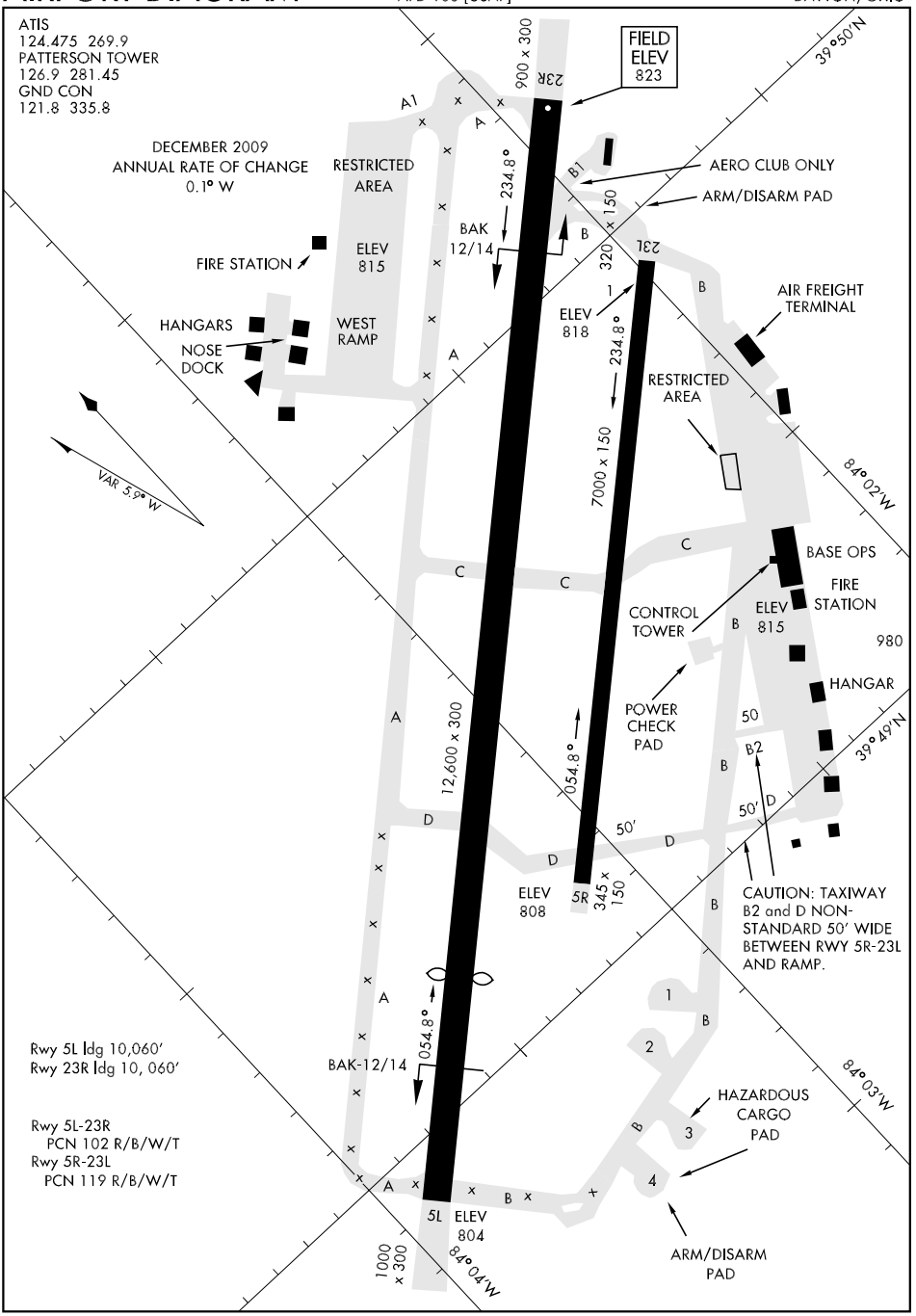
ATIS	DAYTON APP CON	DAYTON TOWER	GND CON	CLNC DEL
125.8	134.45 352.05	119.9 257.8	121.9	121.75

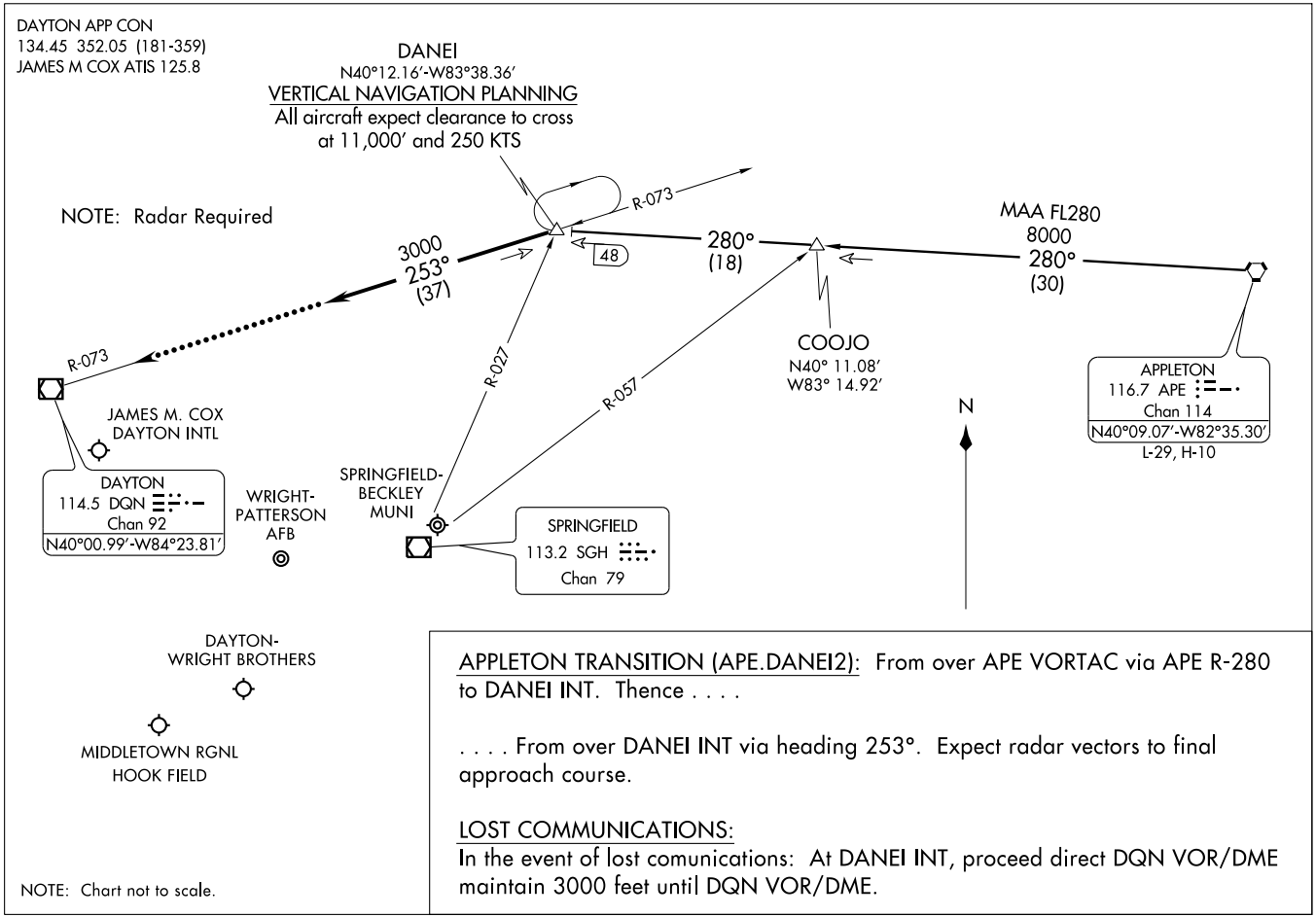




CATEGORY	A	B	C	D
LNAV/VNAV DA	1449-1½ 441 (500-1½)			
LNAV MDA	1500-1 492 (500-1)		1500-1¼ 492 (500-1¼)	1500-1½ 492 (500-1½)
CIRCLING	1560-1 551 (600-1)		1560-1½ 551 (600-1½)	1560-2 551 (600-2)




ATIS
124.475 269.9
PATTERSON TOWER
126.9 281.45
GND CON
121.8 335.8
DECEMBER 2009
ANNUAL RATE OF CHANGE
0.1° W
RESTRICTED AREA
ELEV 815
WEST RAMP
FIRE STATION
HANGARS
NOSE DOCK
VAR 5.9° W
FIELD ELEV 823
23R
900 x 300
A1
A
234.8°
BAK 12/14
B1
AERO CLUB ONLY
ARM/DISARM PAD
B
320 x 150
23L
1
ELEV 818
234.8°
7000 x 150
AIR FREIGHT TERMINAL
RESTRICTED AREA
39°50'N
84°02'W
C
BASE OPS
FIRE STATION
CONTROL TOWER
ELEV 815
980
HANGAR
POWER CHECK PAD
50
B2
12,600 x 300
054.8°
D
50'
ELEV 808
5R
345 x 150
CAUTION: TAXIWAY B2 and D NON-STANDARD 50' WIDE BETWEEN RWY 5R-23L AND RAMP.
39°47'N
Rwy 5L ldg 10,060'
Rwy 23R ldg 10, 060'
BAK-12/14
054.8°
Rwy 5L-23R
PCN 102 R/B/W/T
Rwy 5R-23L
PCN 119 R/B/W/T
HAZARDOUS CARGO PAD
ARM/DISARM PAD
5L
ELEV 804
1000 x 300
84°04'W
84°03'W


DAYTON APP CON
134.45 352.05 (181-359)
JAMES M COX ATIS 125.8
DANEI
N40°12.16′-W83°38.36′
VERTICAL NAVIGATION PLANNING
All aircraft expect clearance to cross
at 11,000′ and 250 KTS
NOTE: Radar Required
R-073
3000
253°
(37)
48
280°
(18)
MAA FL280
8000
280°
(30)
R-073
R-027
R-057
COOJO
N40° 11.08′
W83° 14.92′
N
APPLETON
116.7 APE
Chan 114
N40°09.07′-W82°35.30′
L-29, H-10
JAMES M. COX
DAYTON INTL
DAYTON
114.5 DQN
Chan 92
N40°00.99′-W84°23.81′
WRIGHT-
PATTERSON
AFB
SPRINGFIELD-
BECKLEY
MUNI
SPRINGFIELD
113.2 SGH
Chan 79
DAYTON-
WRIGHT BROTHERS
MIDDLETOWN RGNL
HOOK FIELD
APPLETON TRANSITION (APE.DANEI2): From over APE VORTAC via APE R-280 to DANEI INT. Thence . . . .
. . . . From over DANEI INT via heading 253°. Expect radar vectors to final approach course.
LOST COMMUNICATIONS:
In the event of lost comunications: At DANEI INT, proceed direct DQN VOR/DME maintain 3000 feet until DQN VOR/DME.
NOTE: Chart not to scale.
(DANEI.DANEI2) 09295
DANEI TWO ARRIVAL
ST-107 (FAA)
DAYTON, OHIO

HI-ILS or LOC RWY 23R

LOC I-FFO	APCH CRS	Rwy ldg 10,060 TDZE 823 Arpt Elev 823
109.7	233°	

JAL-108 [USAF]

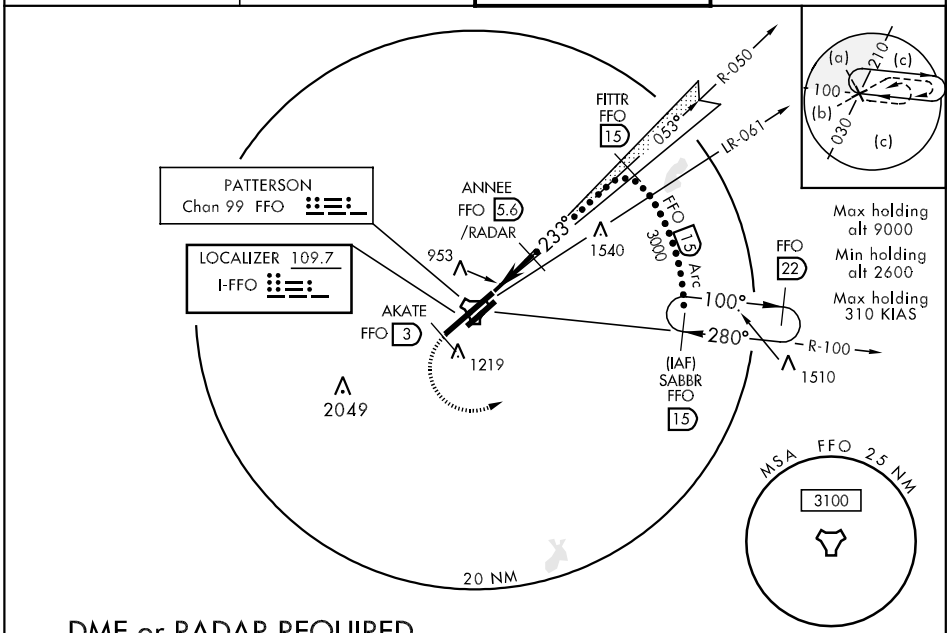
WRIGHT-PATTERSON AFB (KFFO)

▼ * When ALS inop, increase all CAT RVR/vis to 40/¾ mile.
** When ALS inop, increase CAT C RVR/vis to 60/1¼ miles, CAT D vis to 1½ miles, CAT E vis to 1¾ miles.

ALSF-1

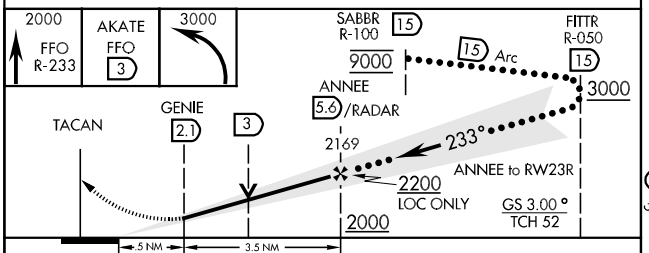
MISSED APPROACH: Climb via FFO R-233 to 2000, at 3 DME (AKATE) turn left direct SABBR climbing to 3000 and hold.

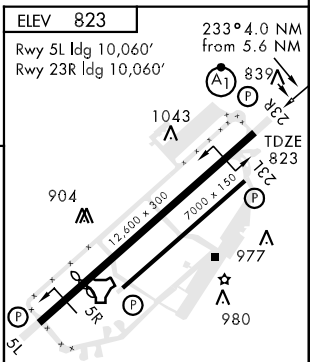
ATIS	DAYTON APP CON	PATTERSON TOWER	GND CON
124.475 269.9	118.85 269.275	126.9 281.45	121.8 335.8



DME or RADAR REQUIRED FOR LOCALIZER

EMERG SAFE ALT 100 NM 3300





HIRL Rwy 5L-23R
MIRL Rwy 5R-23L

CATEGORY	C	D	E
S-ILS 23R *	1023/24 200 (200-½)		
S-LOC 23R**	1320/40 497 (500-¾)	1320/50 497 (500-1)	1320/60 497 (500-1¼)
CIRCLING	1420-1½ 597 (600-1½)	1460-2 637 (700-2)	1620-2¾ 797 (800-2¾)

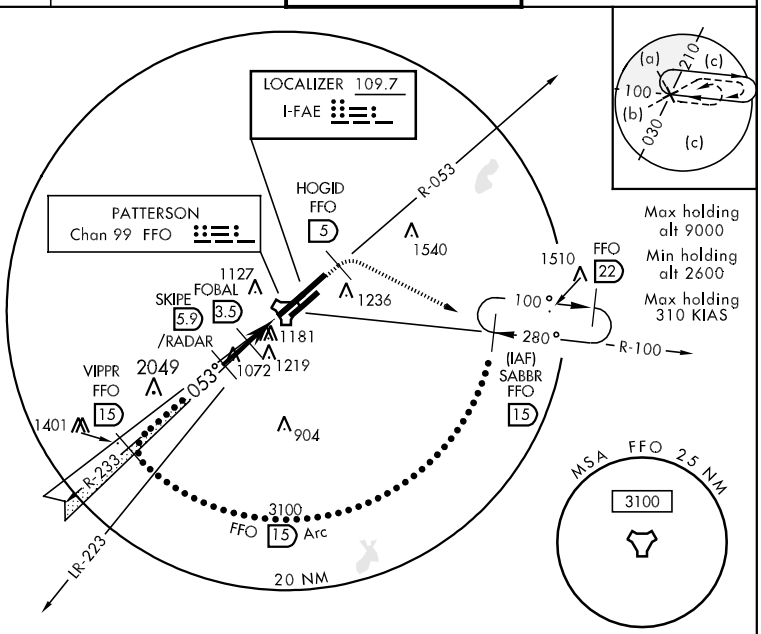
FAF to MAP 3.5 NM					
Knots	120	140	160	180	200
Min:Sec	1:45	1:30	1:19	1:10	1:03

LOC I-FAE 109.7	APCH CRS 053°	Rwy ldg 10,060 TDZE 804 Arpt Elev 823	JAL-108 [USAF]	WRIGHT-PATTERSON AFB (KFFO)

HI-LOC RWY 5L

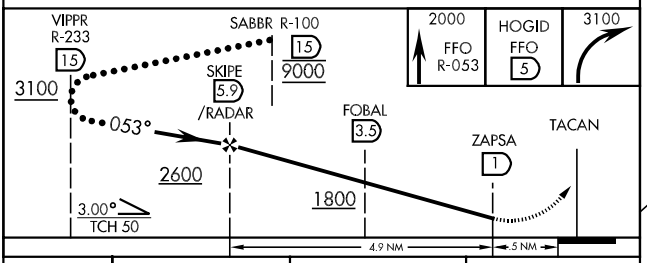
MISSED APPROACH: Climb to 2000 via FFO R-053, at 5 DME (HOGID) turn right direct SABBR climbing to 3100 and hold.

ATIS	DAYTON APP CON	PATTERSON TOWER	GND CON
124.475 269.9	118.85 269.275	126.9 281.45	121.8 335.8

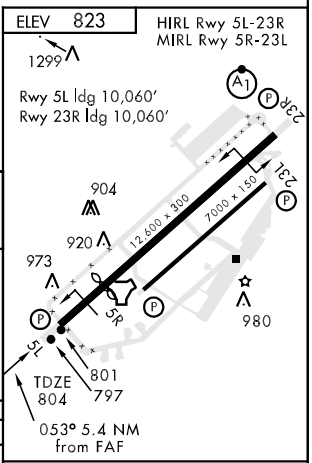


DME or RADAR REQUIRED FOR LOCALIZER

EMERG SAFE ALT 100 NM 3300



CATEGORY	C	D	E
S-LOC 5L	1320-1¾ 516 (600-1¾)		
CIRCLING	1460-1¾ 637 (700-1¾)	1460-2 637 (700-2)	1620-2¾ 797 (800-2¾)



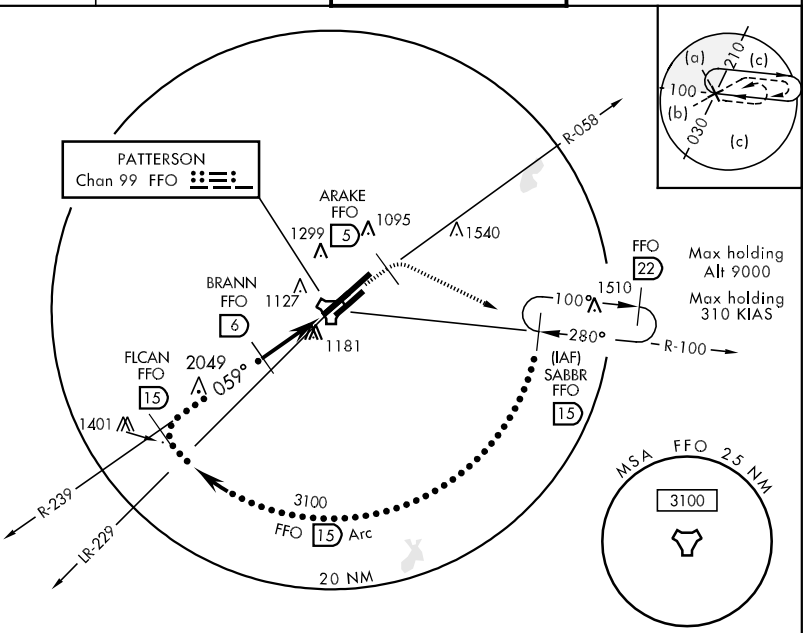
FAF to MAP 4.9 NM					
Knots	120	140	160	180	200
Min:Sec	2:27	2:06	1:50	1:38	1:28

HI-TACAN RWY 5L

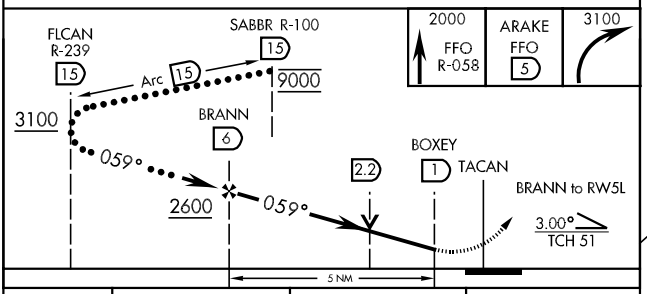
TACAN FFO Chan 99	APCH CRS 059°	Rwy ldg 10,060 TDZE 804 Arpt Elev 823	JAL-108 [USAF]	WRIGHT-PATTERSON AFB (KFFO)

MISSED APPROACH: Climb to 2000 via FFO R-058, at 5 DME (ARAKE), turn right direct SABBR climbing to 3100 and hold.

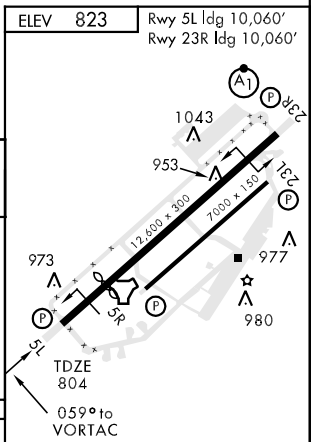
ATIS	DAYTON APP CON	PATTERSON TOWER	GND CON
124.475 269.9	118.85 269.275	126.9 281.45	121.8 335.8



EMERG SAFE ALT 100 NM 3300



CATEGORY	C	D	E
S-5L	1460-1¾ 656 (700-1¾)	1460-2 656 (700-2)	1460-2¼ 656 (700-2¼)
CIRCLING	1420-1½ 597 (600-1½)	1460-2 637 (700-2)	1620-2¾ 797 (800-2¾)



HIRL Rwy 5L-23R
MIRL Rwy 5R-23L

HI-TACAN RWY 23R

TACAN FFO Chan 99	APCH CRS 230°	Rwy ldg 10,060 TDZE 823 Arpt Elev 823

JAL-108 [USAF]

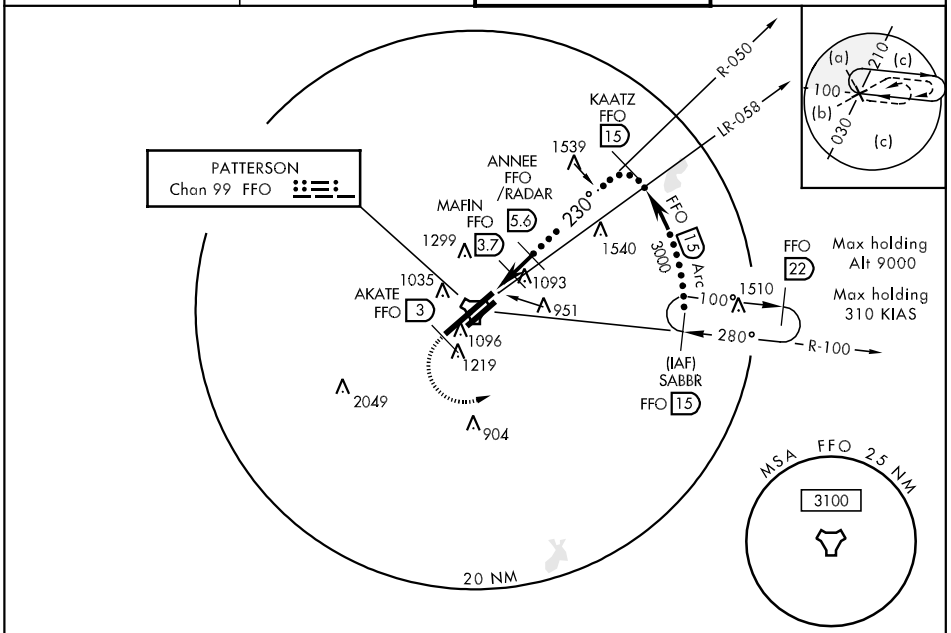
WRIGHT-PATTERSON AFB (KFFO)

* When ALS inop, increase CAT C RVR to 60 and vis to 1¼ miles, CAT D vis to 1½ miles, and CAT E vis to 1¾ miles.

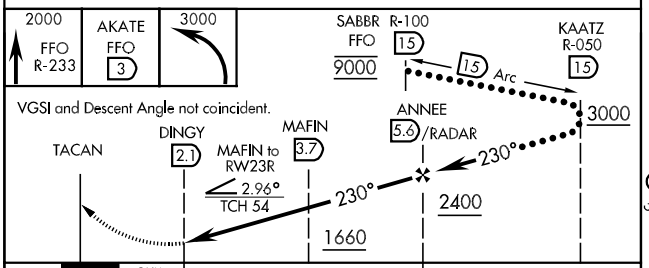
ALSF-1

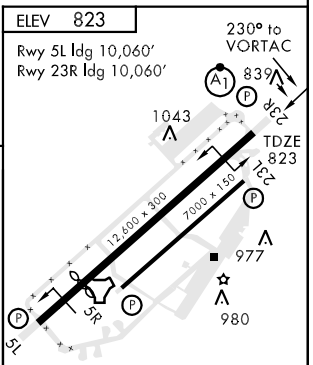
MISSED APPROACH: Climb to 2000 via FFO R-233, at 3 DME (AKATE), turn left direct SABBR climbing to 3000 and hold.

ATIS	DAYTON APP CON	PATTERSON TOWER	GND CON
124.475 269.9	118.85 269.275	126.9 281.45	121.8 335.8



EMERG SAFE ALT 100 NM 3300





CATEGORY	C	D	E
S-23R *	1320/40 497 (500-¾)	1320/50 497 (500-1)	1320/60 497 (500-1¼)
CIRCLING	1420-1½ 597 (600-1½)	1460-2 637 (700-2)	1620-2¾ 797 (800-2¾)

HIRL Rwy 5L-23R
MIRL Rwy 5R-23L

ILS RWY 23R

LOC I-FFO	APCH CRS	Rwy ldg / TDZE / Arpt Elev
109.7	233°	10,060 / 823 / 823

AL-108 [USAF]

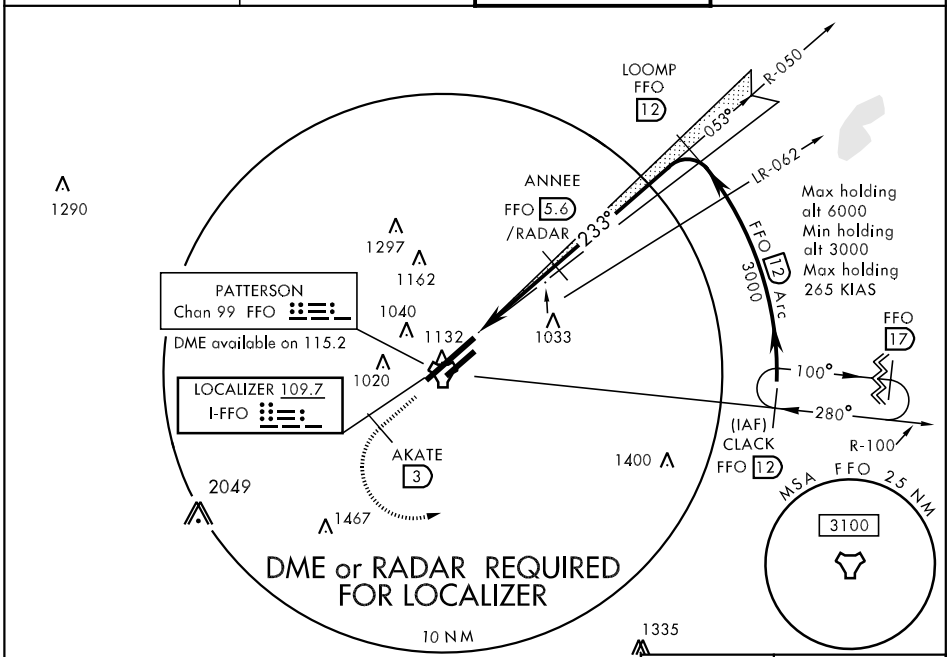
WRIGHT-PATTERSON AFB (KFFO)

* When ALS inop, increase all CAT RVR/vis to 40/¾.
** When ALS inop, increase RVR/vis to CAT AB 50/1, CAT C 60/1¼, CAT D 1½, CAT E 1¾.

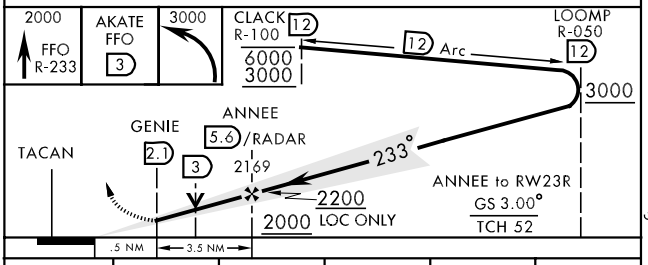
ALSF-1

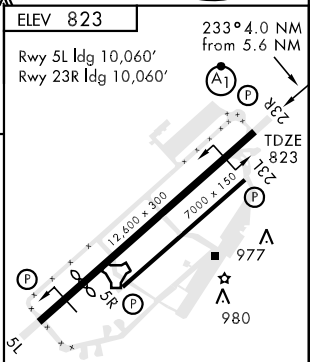
MISSED APPROACH: Climb via FFO R-233 to 2000, at 3 DME turn left direct CLACK to 3000 and hold.

ATIS	DAYTON APP CON	PATTERSON TOWER	GND CON
124.475 269.9	118.85 269.275	126.9 281.45	121.8 335.8



EMERG SAFE ALT 100 NM 3300





HIRL Rwy 5L-23R
MIRL Rwy 5R-23L

CATEGORY	A	B	C	D	E
S-ILS 23R *	1023/24		200	(200-½)	
S-LOC 23R **	1320/24 497	(500-½)	1320/40 497 (500-¾)	1320/50 497 (500-1)	1320/60 497(500-1¼)
CIRCLING	1380-1 557 (600-1)	1400-1 577 (600-1)	1420-1½ 597 (600-1½)	1460-2 637 (700-2)	1620-2¾ 797 (800-2¾)

FAF to MAP 3.5 NM

Knots	60	90	120	150	180
Min:Sec	3:30	2:20	1:45	1:24	1:10

ILS Z RWY 23R

LOC I-FFO	APCH CRS	Rwy ldg / TDZE / Arpt Elev
109.7	233°	10,060 / 823 / 823

AL-108 [USAF]

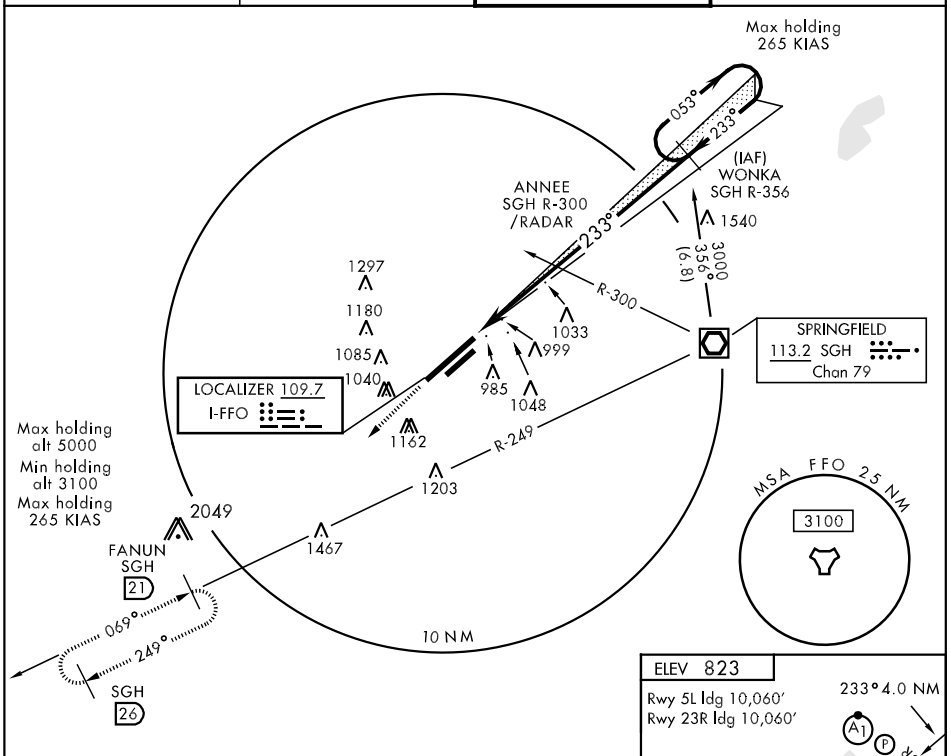
WRIGHT-PATTERSON AFB (KFFO)

* When ALS inop, increase all CAT RVR/vis to 40/¾.
** When ALS inop, increase RVR/vis to CAT AB 50/1, CAT C 60/1¼, CAT D 1½, CAT E 1¾.

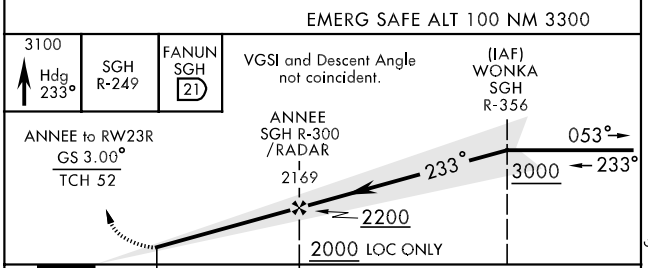
ALSF-1

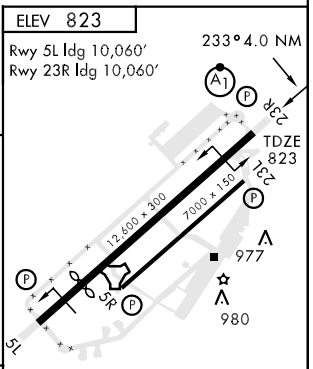
MISSED APPROACH: Track hdg 233° climb to 3100 intercept SGH R-249 to FANUN and hold.

ATIS	DAYTON APP CON	PATTERSON TOWER	GND CON
124.475 269.9	118.85 269.275	126.9 281.45	121.8 335.8



EMERG SAFE ALT 100 NM 3300





HIRL Rwy 5L-23R
MIRL Rwy 5R-23L

CATEGORY	A	B	C	D	E
S-ILS 23R *	1023/24		200	(200-½)	
S-LOC 23R **	1320/24 497	(500-½)	1320/40 497 (500-¾)	1320/50 497 (500-1)	1320/60 497(500-1¼)
CIRCLING	1380-1 557 (600-1)	1400-1 577 (600-1)	1420-1½ 597 (600-1½)	1460-2 637 (700-2)	1620-2¾ 797 (800-2¾)

FAF to MAP 3.5 NM

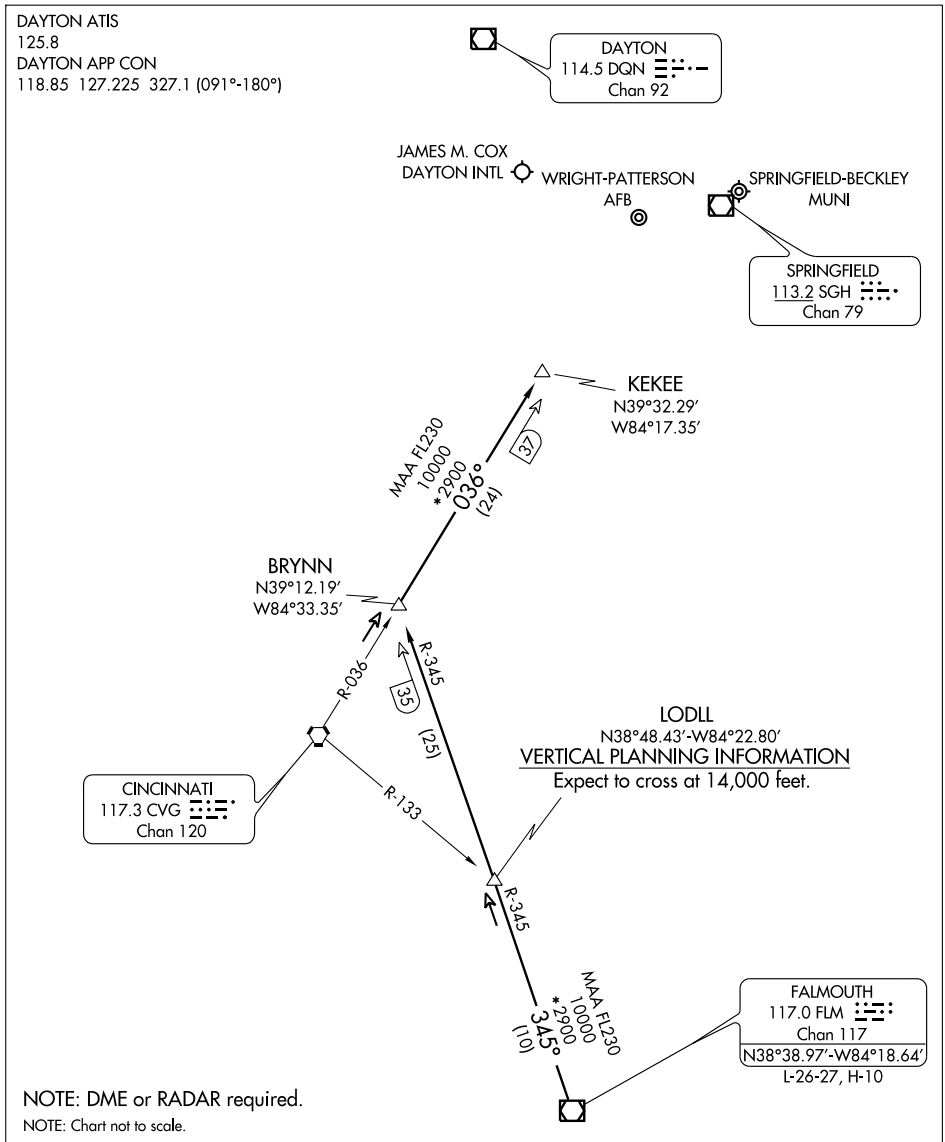
Knots	60	90	120	150	180
Min:Sec	3:30	2:20	1:45	1:24	1:10

(KEKEE.KEKEE3) 09183

KEKEE THREE ARRIVAL

ST-107 (FAA)

DAYTON, OHIO



FALMOUTH TRANSITION (FLM.KEKEE3): From over FLM VOR/DME via FLM R-345 to BRYNN INT, then via CVG R-036 to KEKEE INT. Thence. . . .

. . . . From over KEKEE INT: Expect radar vectors to join final approach course.

EC-2, 14 JAN 2010 to 11 FEB 2010

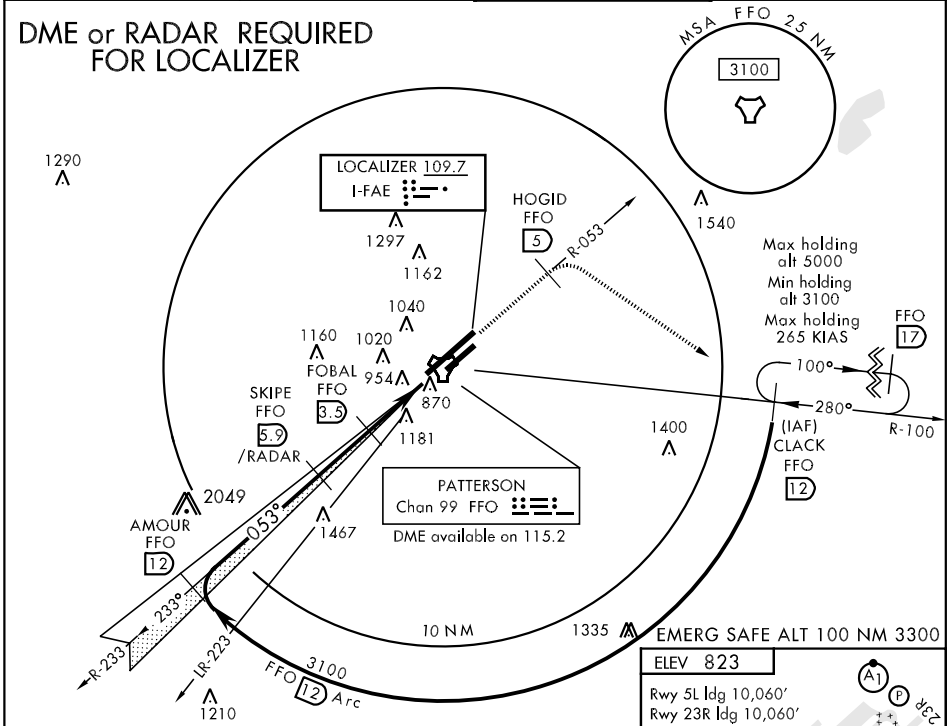
LOC I-FAE 109.7	APCH CRS 053°	Rwy ldg 10,060 TDZE 804 Arpt Elev 823	AL-108 [USAF]	WRIGHT-PATTERSON AFB (KFFO)

LOC RWY 5L

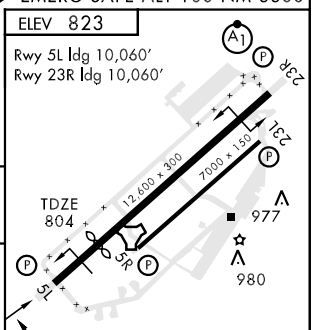
MISSED APPROACH: Climb to 2000 via FFO R-053 at 5 DME, turn right direct CLACK climbing to 3100 and hold.

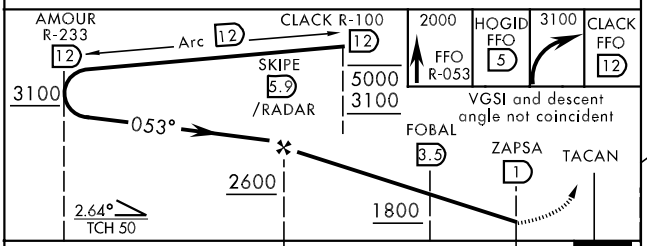
ATIS	DAYTON APP CON	PATTERSON TOWER	GND CON
124.475 269.9	118.85 269.275	126.9 281.45	121.8 335.8

DME or RADAR REQUIRED FOR LOCALIZER



EMERG SAFE ALT 100 NM 3300





HIRL Rwy 5L-23R
MIRL Rwy 5R-23L

CATEGORY	A	B	C	D	E
S-LOC 5L	1320-1¾ 516 (600-1¾)				
CIRCLING	1460-1¾ 637 (700-1¾)		1460-2 637 (700-2)	1620-2¾ 797 (800-2¾)	

FAF to MAP 4.9 NM					
Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38

RNAV (GPS) RWY 23R

APCH CRS	Rwy ldg	10,060
233°	TDZE	823
	Arpt Elev	823

AL-108 [USAF]

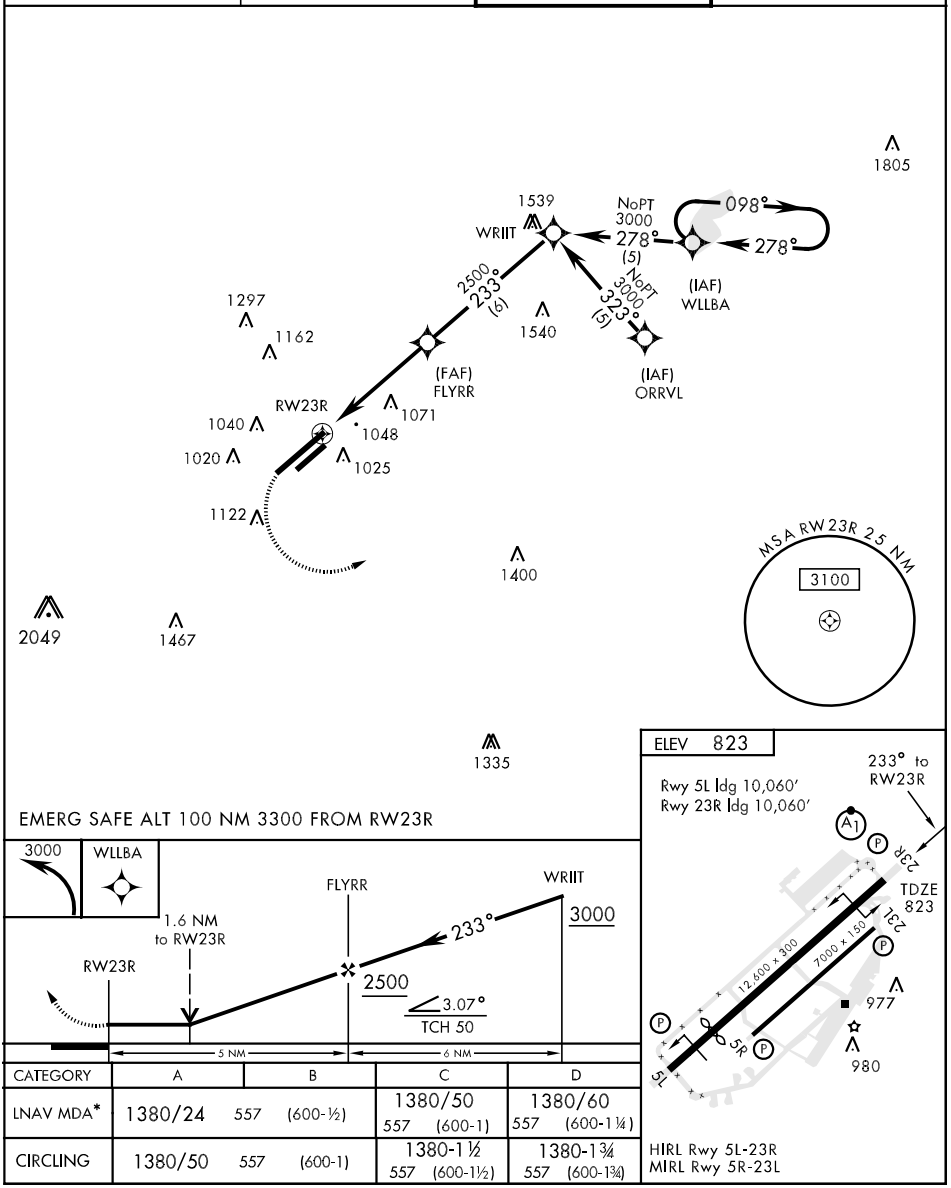
WRIGHT-PATTERSON AFB (KFFO)

* When ALS inop, increase CAT AB vis to 1 mile, CAT C vis to 1½ miles, CAT D vis to 1¾ miles.
DME/DME RNP-0.3 NA

ALSF-1

MISSED APPROACH: Turn left climb to 3000 direct WLLBA WPT and hold.

ATIS	DAYTON APP CON	PATTERSON TOWER	GND CON
124.475 269.9	118.85 269.275	126.9 281.45	121.8 335.8



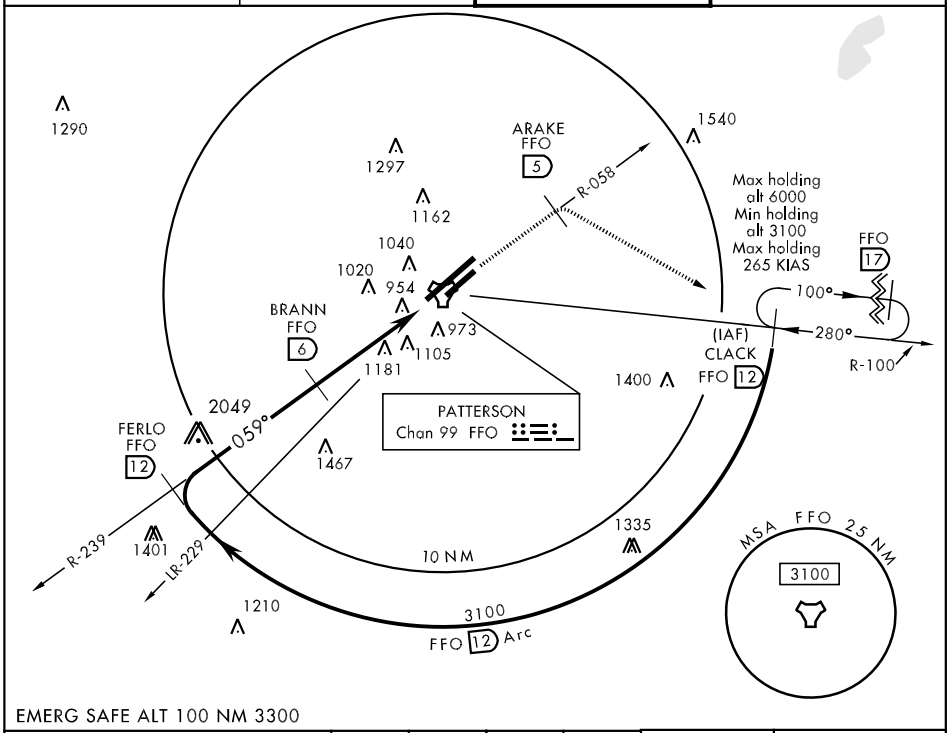
CATEGORY	A	B	C	D
LNAV MDA*	1380/24 557 (600-½)		1380/50 557 (600-1)	1380/60 557 (600-1¼)
CIRCLING	1380/50 557 (600-1)		1380-1½ 557 (600-1½)	1380-1¾ 557 (600-1¾)

TACAN RWY 5L

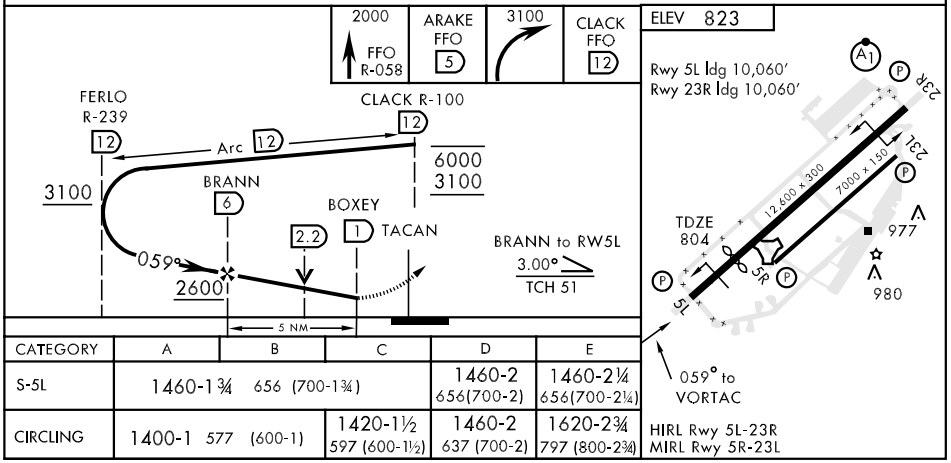
TACAN FFO Chan 99	APCH CRS 059°	Rwy ldg 10,060 TDZE 804 Arpt Elev 823	AL-108 [USAF]	WRIGHT-PATTERSON AFB (KFFO)

MISSED APPROACH: Climb to 2000 via FFO R-058 to 5 DME, turn right direct CLACK climbing to 3100 and hold.

ATIS	DAYTON APP CON	PATTERSON TOWER	GND CON
124.475 269.9	118.85 269.275	126.9 281.45	121.8 335.8



EMERG SAFE ALT 100 NM 3300



CATEGORY	A	B	C	D	E
S-5L	1460-1¾ 656 (700-1¾)			1460-2 656(700-2)	1460-2¼ 656(700-2¼)
CIRCLING	1400-1 577 (600-1)		1420-1½ 597 (600-1½)	1460-2 637 (700-2)	1620-2¾ 797 (800-2¾)

HIRL Rwy 5L-23R
MIRL Rwy 5R-23L

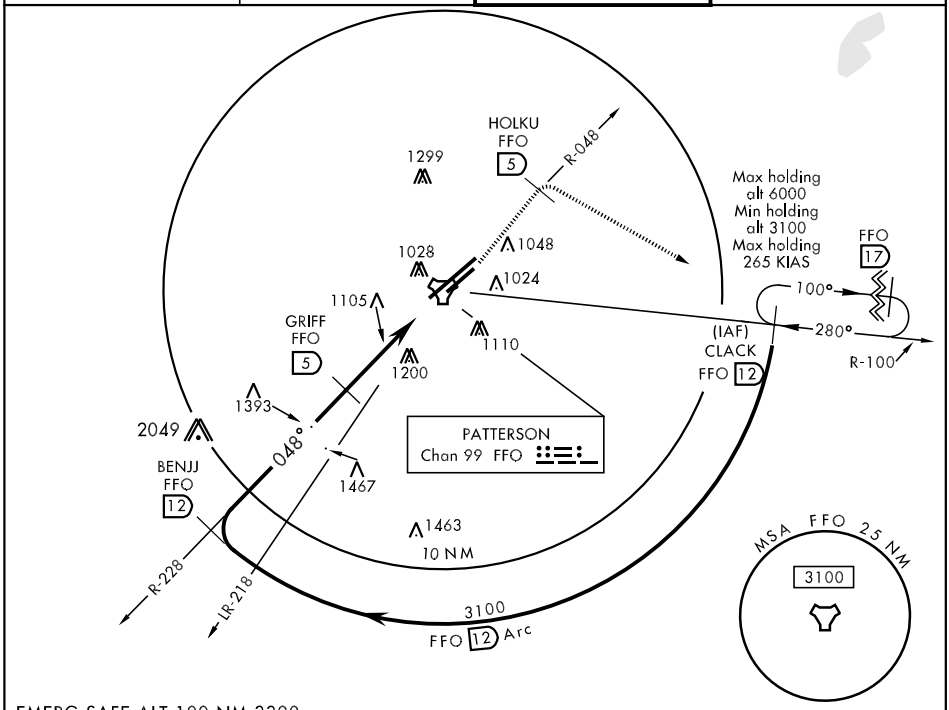
TACAN RWY 5R

TACAN FFO Chan 99	APCH CRS 048°	Rwy ldg 7000 TDZE 812 Arpt Elev 823	AL-108 [USAF]

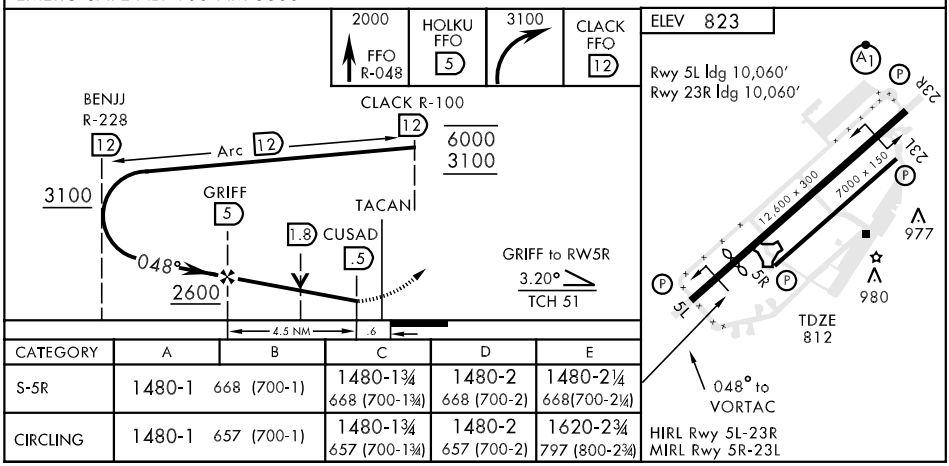
WRIGHT-PATTERSON AFB (KFFO)

MISSED APPROACH: Climb to 2000 via FFO R-048 to HOLKU, turn right direct CLACK climbing to 3100 and hold.

ATIS	DAYTON APP CON	PATTERSON TOWER	GND CON
124.475 269.9	118.85 269.275	126.9 281.45	121.8 335.8



EMERG SAFE ALT 100 NM 3300



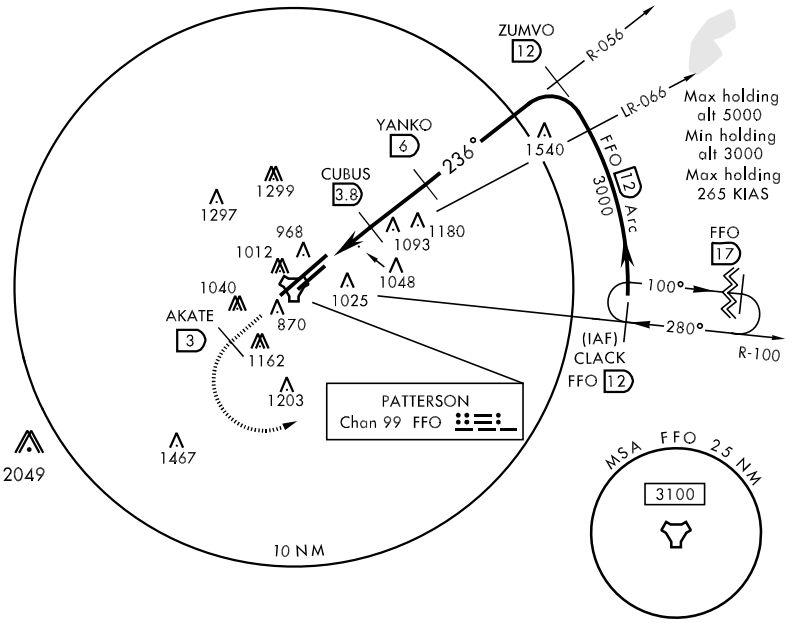
CATEGORY	A	B	C	D	E
S-5R	1480-1	668 (700-1)	1480-1¾ 668 (700-1¾)	1480-2 668 (700-2)	1480-2¼ 668(700-2¼)
CIRCLING	1480-1	657 (700-1)	1480-1¾ 657 (700-1¾)	1480-2 657 (700-2)	1620-2¾ 797 (800-2¾)

TACAN RWY 23L

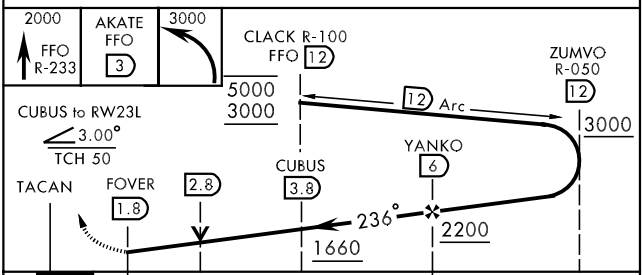
TACAN FFO Chan 99	APCH CRS 236°	Rwy ldg 7000 TDZE 818 Arpt Elev 823	AL-108 [USAF]	WRIGHT-PATTERSON AFB (KFFO)

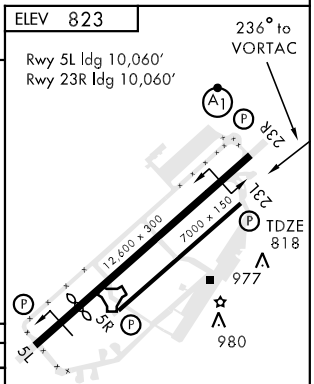
MISSED APPROACH: Climb to 2000 via FFO R-233, at 3 DME turn left direct CLACK climbing to 3000 and hold.

ATIS	DAYTON APP CON	PATTERSON TOWER	GND CON
124.475 269.9	118.85 269.275	126.9 281.45	121.8 335.8



EMERG SAFE ALT 100 NM 3300





CATEGORY	A	B	C	D	E
S-23L	1340-1 522 (600-1)		1340-1½ 522 (600-1½)	1340-1¾ 522 (500-1¾)	
CIRCLING	1380-1 557 (600-1)	1400-1 577 (600-1)	1420-1½ 597 (600-1½)	1460-2 637 (700-2)	1620-2¾ 797 (800-2¾)

HIRL Rwy 5L-23R
MIRL Rwy 5R-23L

TACAN RWY 23R

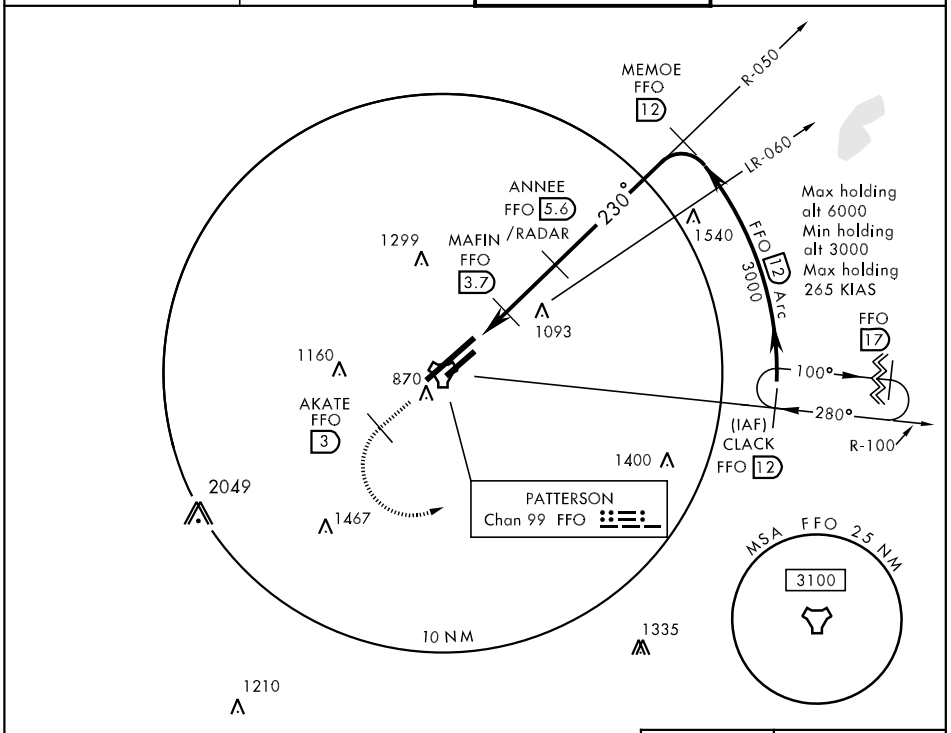
TACAN FFO Chan 99	APCH CRS 230°	Rwy ldg 10,060 TDZE 823 Arpt Elev 823	AL-108 [USAF]	WRIGHT-PATTERSON AFB (KFFO)

* When ALS inop, increase CAT AB RVR to 50 and vis to 1 mile, CAT C RVR to 60 and vis to 1¼ miles, CAT D vis to 1½ miles, and CAT E vis to 1¾ miles.

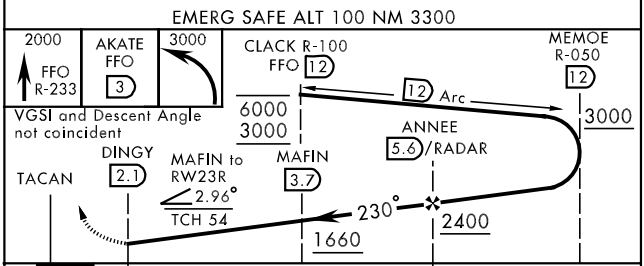
ALSF-1

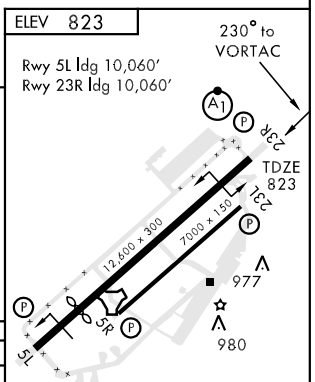
MISSED APPROACH: Climb to 2000 via FFO R-233, at 3 DME turn left direct CLACK climbing to 3000 and hold.

ATIS	DAYTON APP CON	PATTERSON TOWER	GND CON
124.475 269.9	118.85 269.275	126.9 281.45	121.8 335.8



EMERG SAFE ALT 100 NM 3300





CATEGORY	A	B	C	D	E
S-23R *	1320/24 497 (500-½)		1320/40 497 (500-¾)	1320/50 497 (500-1)	1320/60 497(500-1¼)
CIRCLING	1380-1 557 (600-1)	1400-1 577 (600-1)	1420-1½ 597 (600-1½)	1460-2 637 (700-2)	1620-2¾ 797 (800-2¾)

HIRL Rwy 5L-23R
MIRL Rwy 5R-23L

WAAS CH 97702 W07A	APP CRS 068°	Rwy ldg 4500 TDZE 936 Apt Elev 946

RNAV (GPS) RWY 7

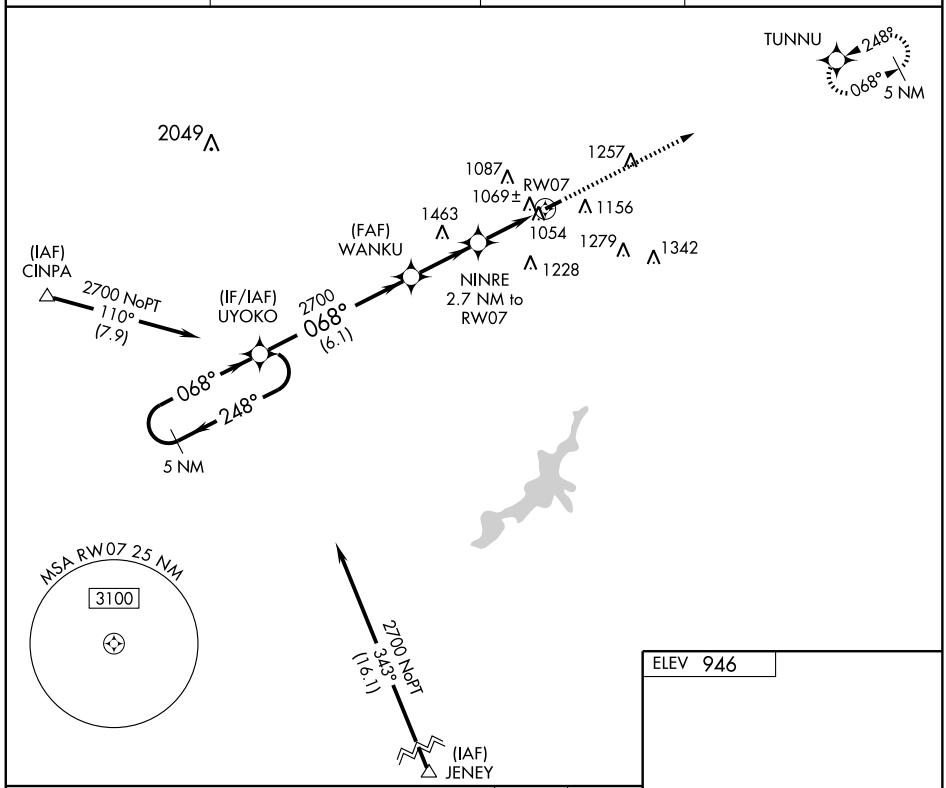
DAYTON / GREENE COUNTY-LEWIS A. JACKSON RGNL (I19)

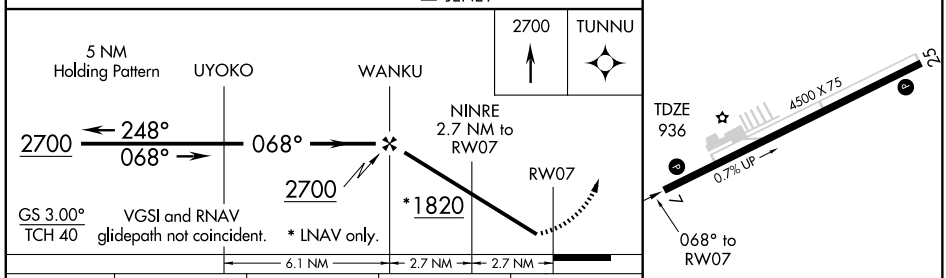
DME/DME RNP-0.3 NA. If local altimeter setting not received, use Dayton-Wright Brothers altimeter setting and increase all DAs/MDAs 40 feet. Visibility reduction by helicopters NA.

NA

MISSED APPROACH: Climb to 2700 direct TUNNU and hold.

AWOS-3	DAYTON APP CON	GCO	UNICOM
118.525	118.85 327.1	121.725	122.7 (CTAF) L





ELEV 946

CATEGORY	A	B	C	D
LPV DA	1236-1¼ 300 (300-1¼)			NA
LNAV MDA	1320-1 384 (400-1)			NA
CIRCLING	1460-1 514 (600-1)		1460-1½ 514 (600-1½)	NA

LIRL Rwy 7-25 L
REIL Rwys 7 and 25 L

EC-2, 14 JAN 2010 to 11 FEB 2010

WAAS CH 56602 W25A	APP CRS 248°	Rwy ldg 4500 TDZE 946 Apt Elev 946

RNAV (GPS) RWY 25

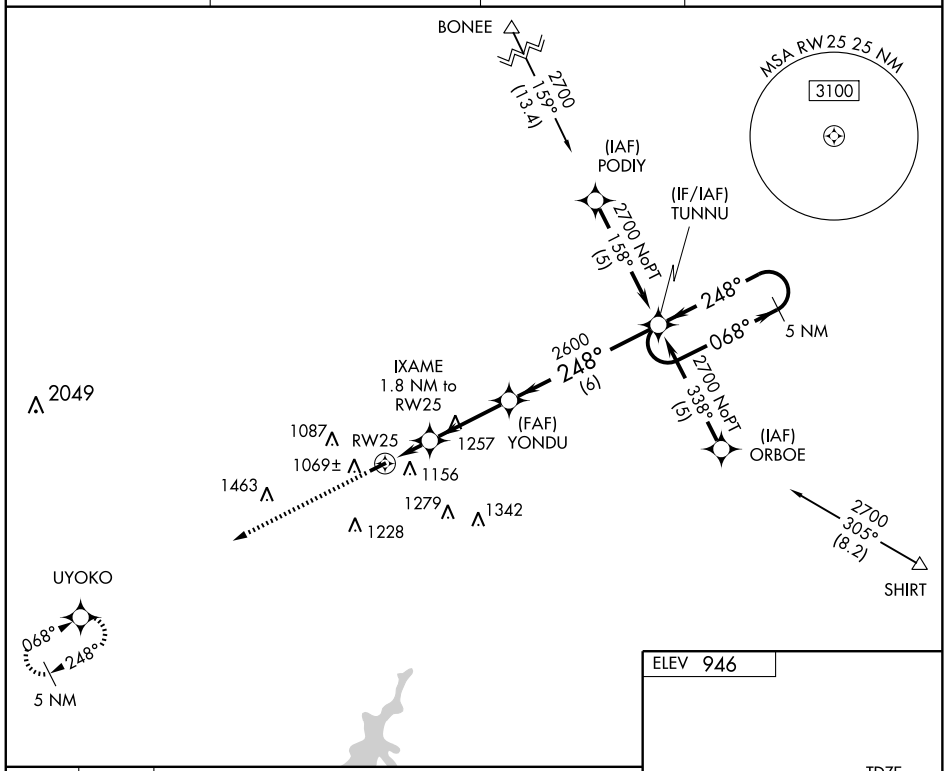
DAYTON / GREENE COUNTY-LEWIS A. JACKSON RGNL (I19)

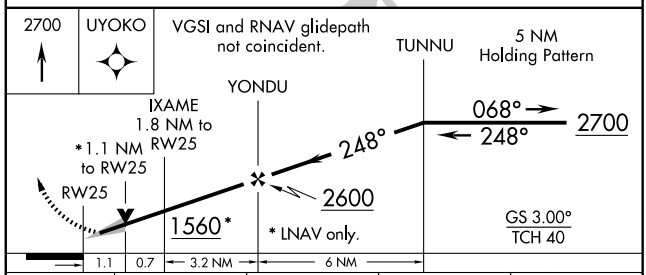
DME/DME RNP-0.3 NA. If local altimeter setting not received, use Dayton-Wright Brothers altimeter setting and increase all DAs/MDAs 40 feet. VDP NA when using Dayton-Wright Brothers altimeter setting.

NA

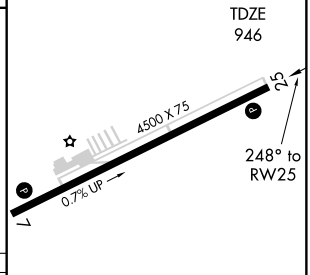
MISSED APPROACH: Climb to 2700 direct UYOKO and hold.

AWOS-3	DAYTON APP CON	GCO	UNICOM
118.525	118.85 327.1	121.725	122.7 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1196-1 250 (300-1)			NA
LNAV MDA	1440-1 494 (500-1)		1440-1¼ 494 (500-1¼)	NA
CIRCLING	1460-1 514 (600-1)		1460-1½ 514 (600-1½)	NA



LIRL Rwy 7-25 L
REIL Rwys 7 and 25 L

VOR/DME SGH 113.2 Chan 79	APP CRS 042°	Rwy ldg N/A TDZE N/A Apt Elev 949

VOR-A

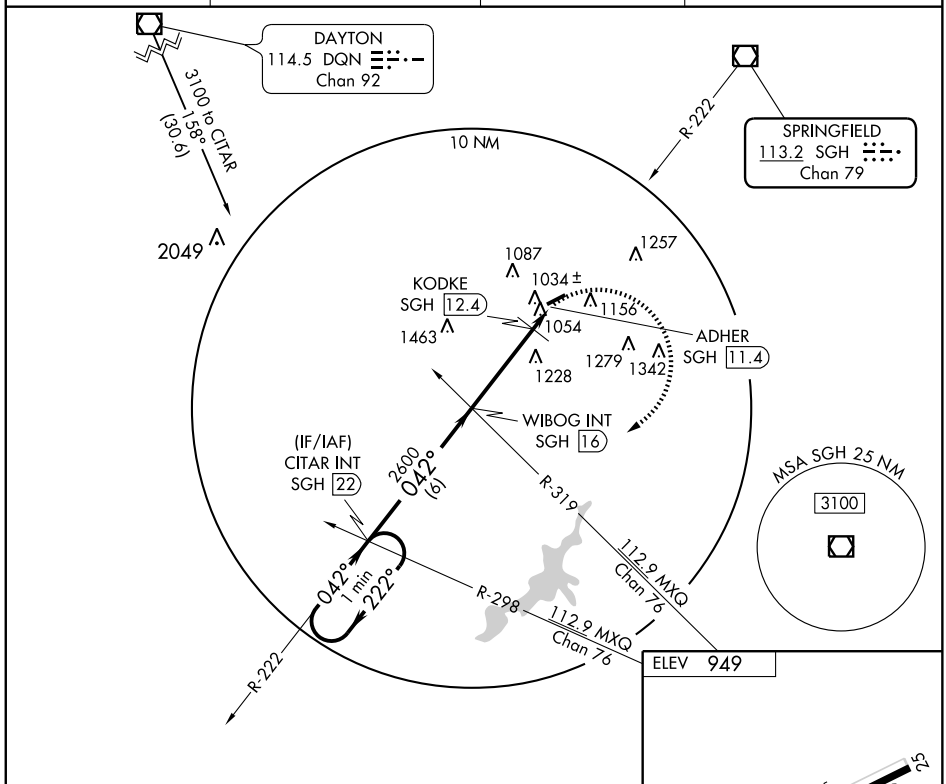
DAYTON / GREENE COUNTY-LEWIS A. JACKSON RGNL (I19)

When local altimeter setting not received, use Dayton-Wright Brothers altimeter setting and increase all MDA 40 feet and Cat C visibility ¼ mile.

NA

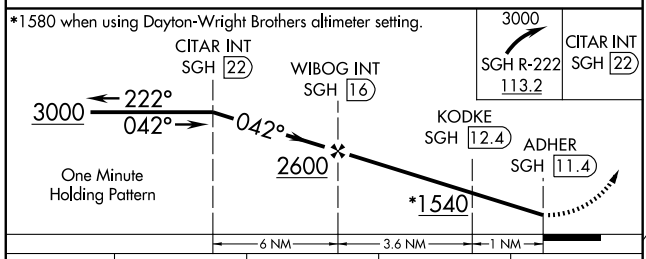
MISSED APPROACH: Climbing right turn to 3000 via SGH VOR/DME R-222 to CITAR Int/SGH 22 DME and hold.

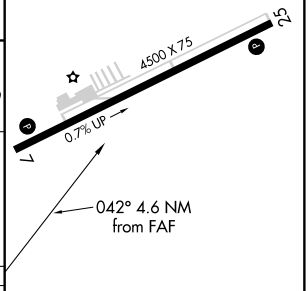
AWOS-3	DAYTON APP CON	GCO	UNICOM
118.525	118.85 327.1	121.725	122.7 (CTAF) L



ELEV 949

*1580 when using Dayton-Wright Brothers altimeter setting.





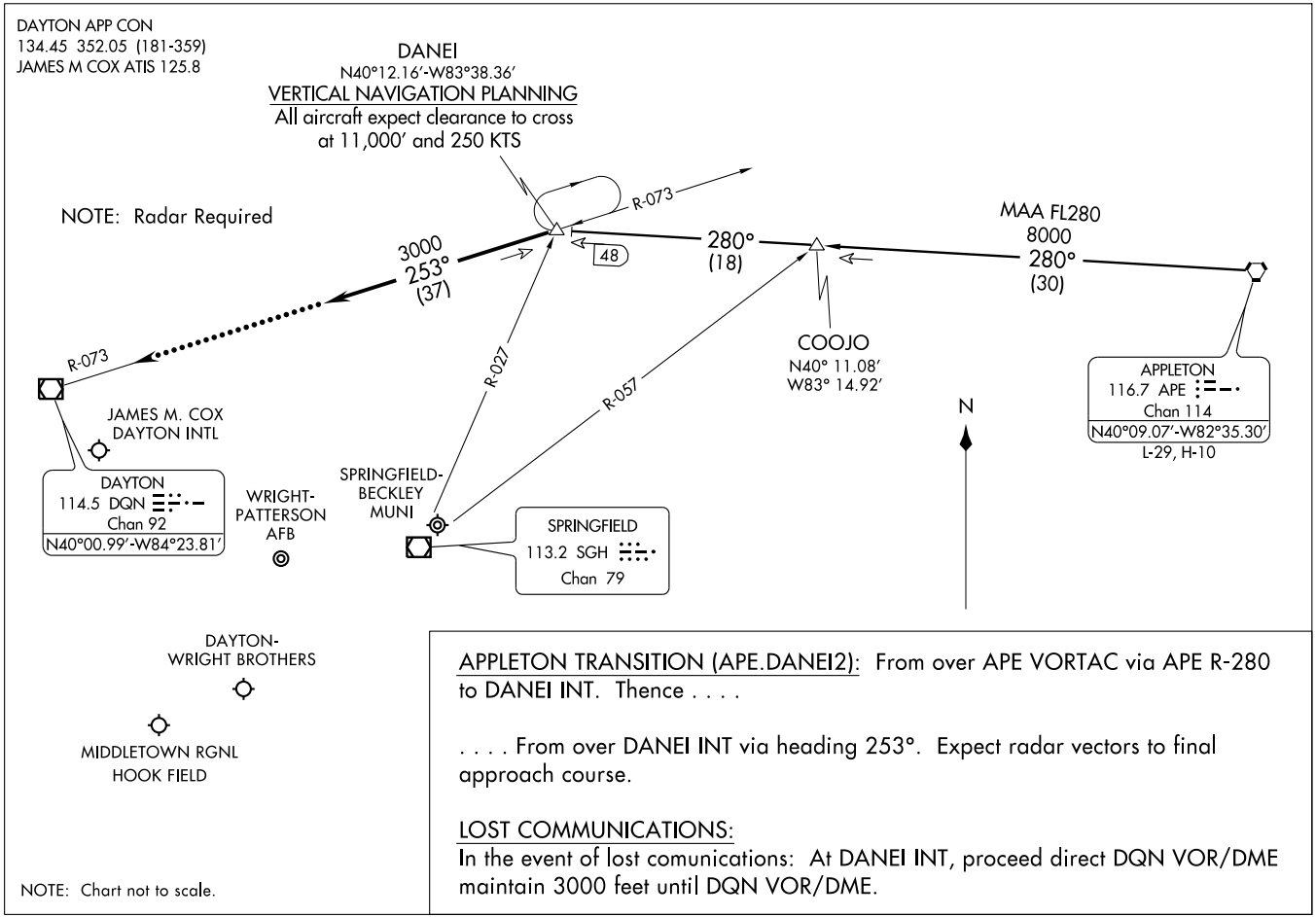
CATEGORY	A	B	C	D
CIRCLING	1540-1	591 (600-1)	1540-1½ 591 (600-1½)	NA
KODKE FIX MINIMUMS				
CIRCLING	1460-1	511 (600-1)	1460-1½ 511 (600-1½)	NA

LIRL Rwy 7-25 L
REIL Rwys 7 and 25 L

FAF to MAP 4.6 NM

Knots	60	90	120	150	180
Min:Sec	4:36	3:04	2:18	1:50	1:32

EC-2. 14 JAN 2010 to 11 FEB 2010


DAYTON APP CON
134.45 352.05 (181-359)
JAMES M COX ATIS 125.8
DANEI
N40°12.16′-W83°38.36′
VERTICAL NAVIGATION PLANNING
All aircraft expect clearance to cross
at 11,000′ and 250 KTS
NOTE: Radar Required
R-073
3000
253°
(37)
48
280°
(18)
MAA FL280
8000
280°
(30)
R-073
R-027
R-057
COOJO
N40° 11.08′
W83° 14.92′
N
APPLETON
116.7 APE
Chan 114
N40°09.07′-W82°35.30′
L-29, H-10
JAMES M. COX
DAYTON INTL
DAYTON
114.5 DQN
Chan 92
N40°00.99′-W84°23.81′
WRIGHT-
PATTERSON
AFB
SPRINGFIELD-
BECKLEY
MUNI
SPRINGFIELD
113.2 SGH
Chan 79
DAYTON-
WRIGHT BROTHERS
MIDDLETOWN RGNL
HOOK FIELD
APPLETON TRANSITION (APE.DANEI2): From over APE VORTAC via APE R-280 to DANEI INT. Thence . . . .
. . . . From over DANEI INT via heading 253°. Expect radar vectors to final approach course.
LOST COMMUNICATIONS:
In the event of lost comunications: At DANEI INT, proceed direct DQN VOR/DME maintain 3000 feet until DQN VOR/DME.
NOTE: Chart not to scale.
(DANEI.DANEI2) 09295
DANEI TWO ARRIVAL
ST-107 (FAA)
DAYTON, OHIO

LOC/DME I-MGY	APP CRS	Rwy ldg	4410
109.5	206°	TDZE	955
Chan 32		Apt Elev	957

LOC/DME RWY 20
DAYTON-WRIGHT BROTHERS (MGY)

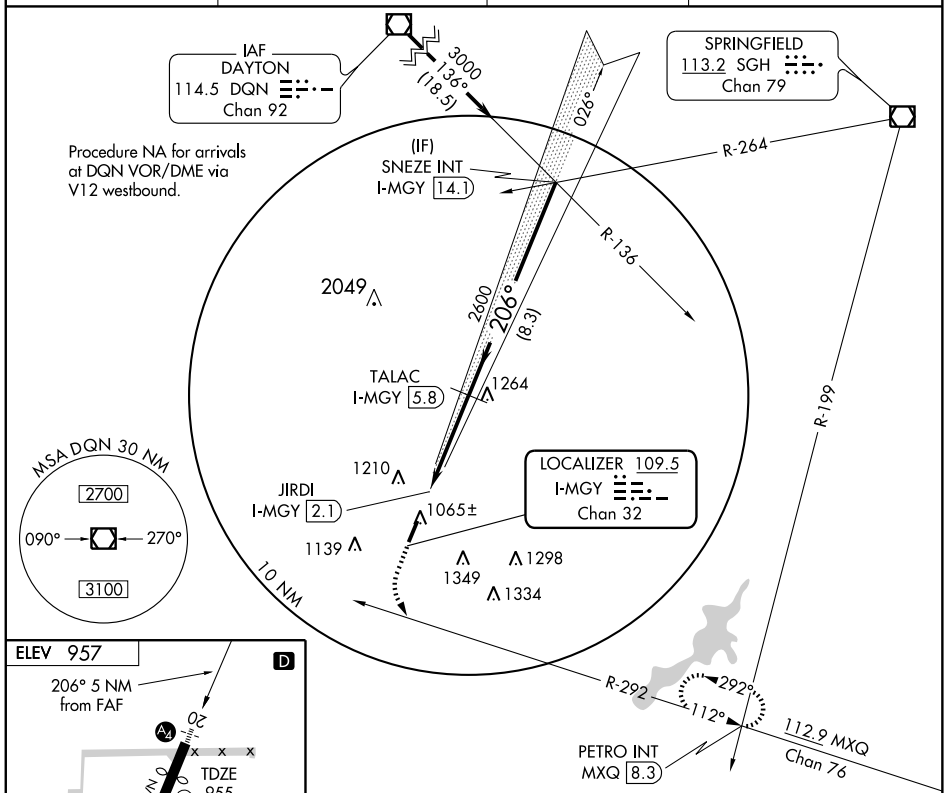
Inoperative table does not apply. Visibility reduction by helicopters NA. If local altimeter setting not received, use James M Cox Dayton Intl altimeter setting and increase all MDAs 60 feet.

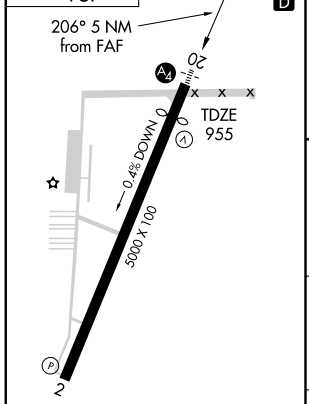
NA

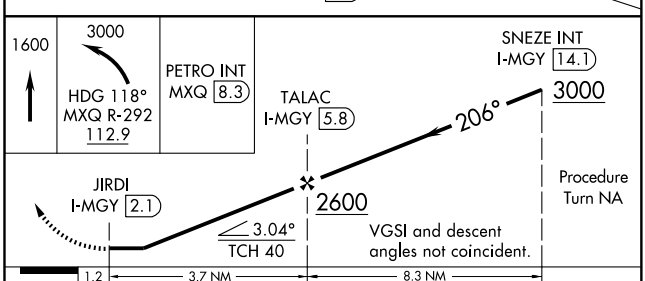
MALSF

MISSED APPROACH: Climb to 1600 then climbing left turn to 3000 via heading 118° and MXQ VOR/DME R-292 to PETRO Int/MXQ 8.3 DME and hold.

ASOS	DAYTON APP CON	CLNC DEL	UNICOM
118.375	118.85 127.225 327.1	119.4	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-20	1320-1½ 365 (400-1½)			
CIRCLING	1480-1½ 523 (600-1½)		1520-1½ 563 (600-1½)	1660-2¼ 703 (800-2¼)

MIRL Rwy 2-20 L

EC-2, 14 JAN 2010 to 11 FEB 2010

LOM MW	APP CRS	Rwy ldg	N/A
223	085°	TDZE	N/A
		Apt Elev	957

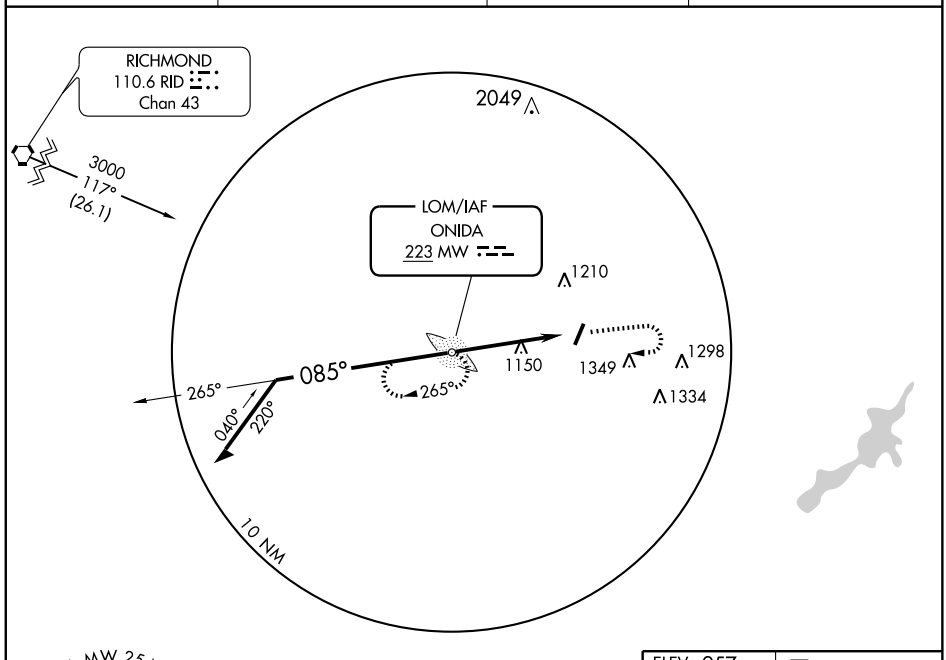
NDB-A
DAYTON-WRIGHT BROTHERS (MGY)

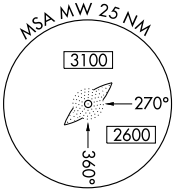
NA

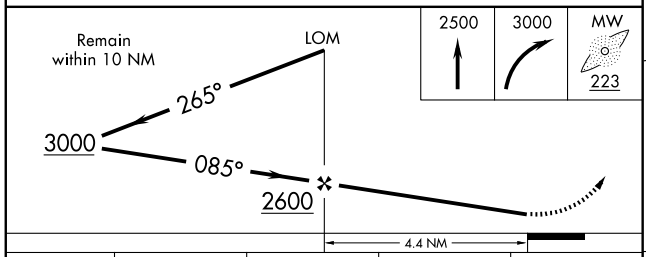
If local altimeter setting not received, use James M Cox Dayton Intl altimeter setting and increase all MDAs 60 feet.

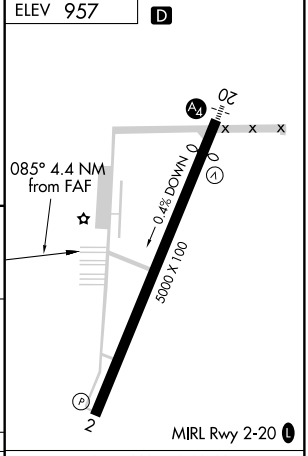
MISSED APPROACH: Climb to 2500, then climbing right turn to 3000 direct MW LOM and hold.

ASOS	DAYTON APP CON	CLNC DEL	UNICOM
118.375	118.85 127.225 327.1	119.4	122.8 (CTAF) L









CATEGORY	A	B	C	D
CIRCLING	1480-1 523 (600-1)		1520-1½ 563 (600-1½)	1660-2¼ 703 (800-2¼)

FAF to MAP 4.4 NM

Knots	60	90	120	150	180
Min:Sec	4:24	2:56	2:12	1:46	1:28

EC-2. 14 JAN 2010 to 11 FEB 2010

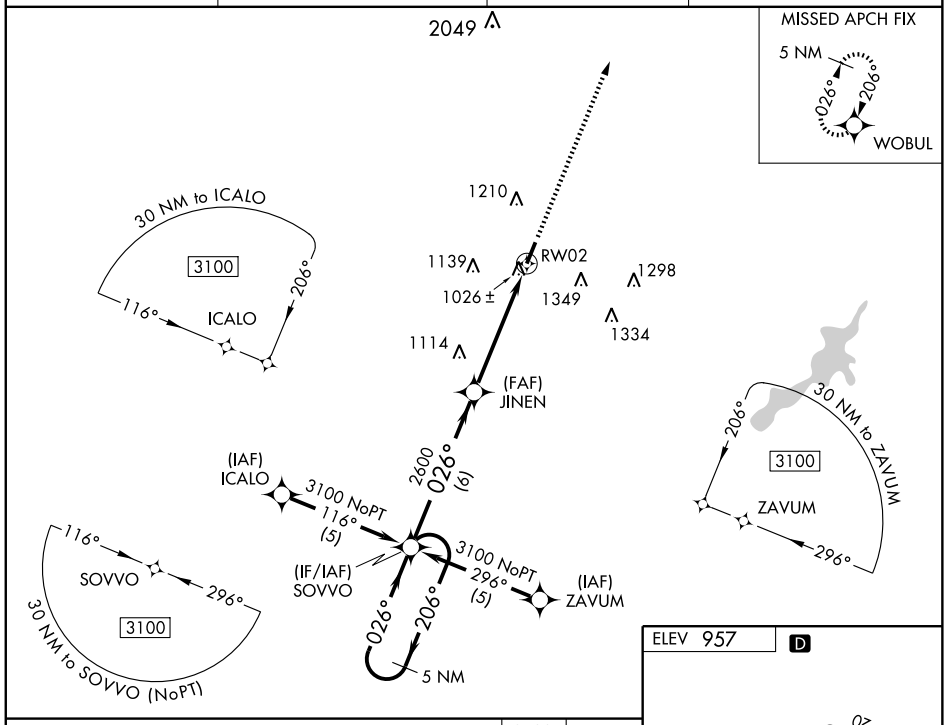
WAAS CH 45801 W02A	APP CRS 026°	Rwy ldg 5000 TDZE 949 Apt Elev 957

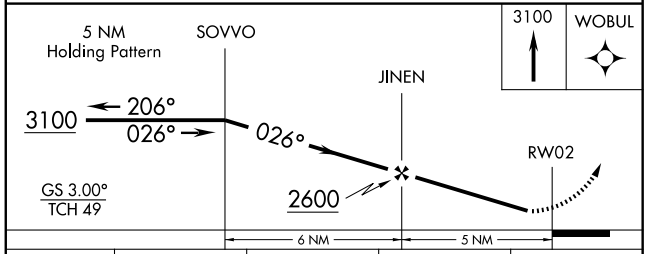
RNAV (GPS) RWY 2
DAYTON-WRIGHT BROTHERS (MGY)

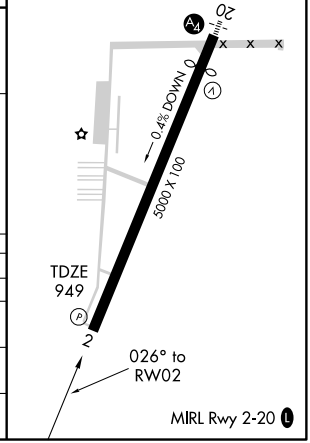
Baro-VNAV NA when using James M Cox Dayton Intl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. Visibility reduction for helicopters NA. If local altimeter setting not received, use James M Cox Dayton Intl altimeter setting and increase all DAs/MDAs 60 feet.

MISSED APPROACH: Climb to 3100 direct WOBUL and hold.

ASOS	DAYTON APP CON	CLNC DEL	UNICOM
118.375	118.85 127.225 327.1	119.4	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1214-1 265 (300-1)			
LNAV/VNAV DA	1299-1¼ 350 (400-1¼)			
LNAV MDA	1420-1 471 (500-1)		1420-1¼ 471 (500-1¼)	1420-1½ 471 (500-1½)
CIRCLING	1480-1¼ 523 (600-1¼)		1520-1½ 563 (600-1½)	1660-2¼ 703 (800-2¼)

WAAS CH 93601 W20A	APP CRS 206°	Rwy ldg 4410 TDZE 955 Apt Elev 957

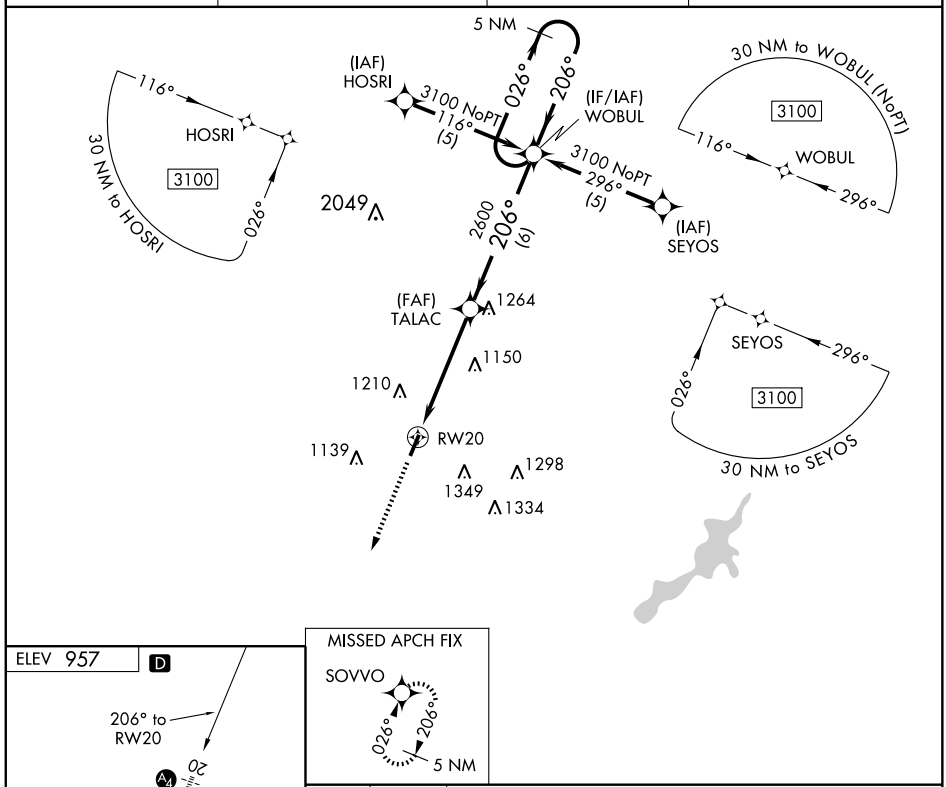
RNAV (GPS) RWY 20
DAYTON-WRIGHT BROTHERS (MGY)

DME/DME RNP-0.3 NA. Inoperative table does not apply. If local altimeter setting not received, use James M Cox Dayton Intl and increase all DAs/MDAs 60 feet. Visibility reduction for helicopters NA. VDP NA when using James M Cox Dayton Intl altimeter setting.

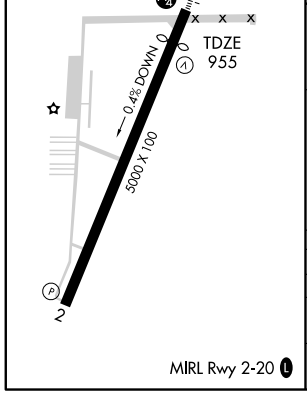
MALS

MISSED APPROACH: Climb to 3100 direct SOVVO and hold.

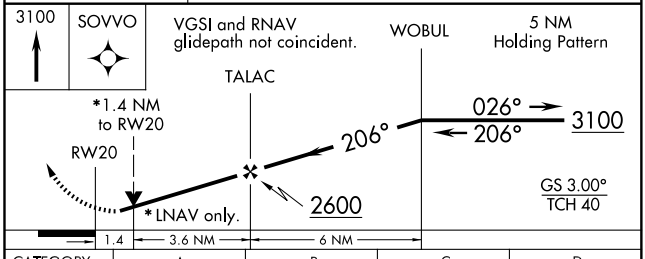
ASOS	DAYTON APP CON	CLNC DEL	UNICOM
118.375	118.85 127.225 327.1	119.4	122.8 (CTAF) L



ELEV 957 D



MIRL Rwy 2-20 L



CATEGORY	A	B	C	D
LPV DA	1294-1¼ 339 (400-1¼)			
LNAV MDA	1440-1 485 (500-1)		1440-1¼ 485 (500-1¼)	1440-1½ 485 (500-1½)
CIRCLING	1480-1¼ 523 (600-1¼)		1520-1½ 563 (600-1½)	1660-2¼ 703 (800-2¼)

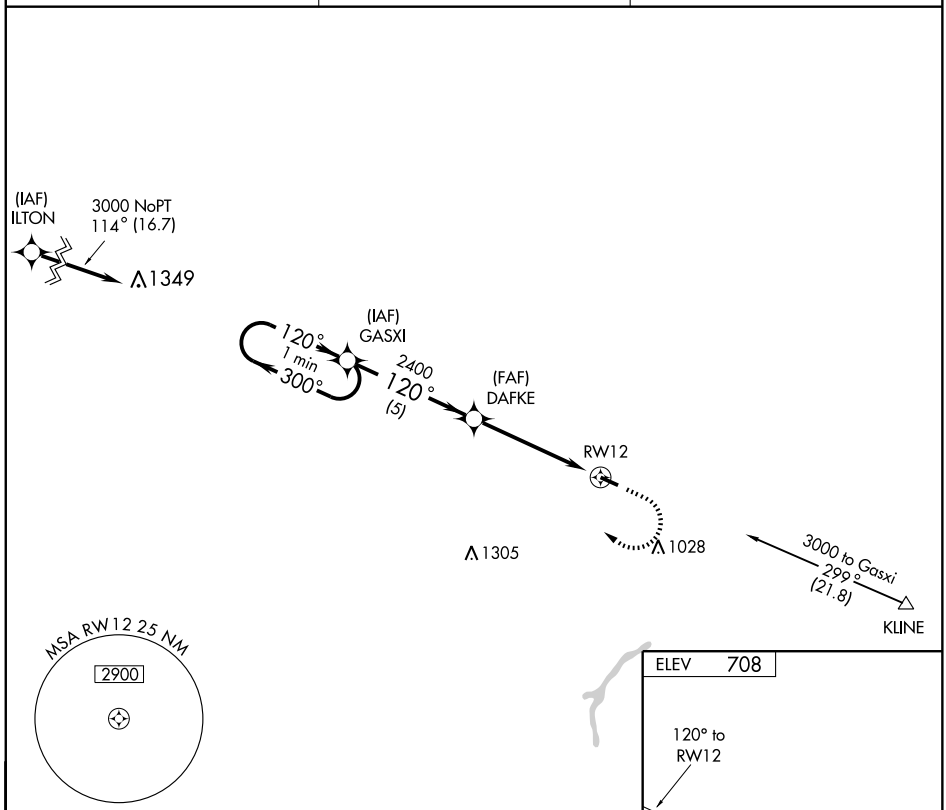
APP CRS	Rwy ldg	4197
120°	TDZE	708
	Apt Elev	708

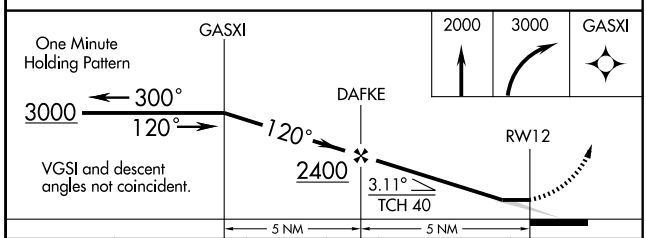
GPS RWY 12
DEFIANCE MEMORIAL (DFI)

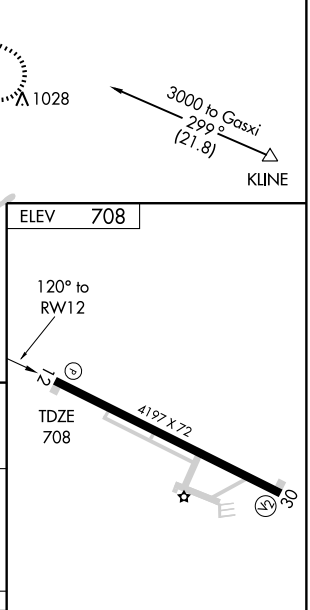
NA

MISSED APPROACH: Climb to 2000 then climbing right turn to 3000 direct GASXI WP and hold.

ASOS	TOLEDO APP CON	UNICOM
121.425	134.35 307.0	122.7 (CTAF) L







CATEGORY	A	B	C	D
S-12	1100-1 392 (400-1)			1100-1¼ 392 (400-1¼)
CIRCLING	1120-1 412 (500-1)	1160-1 452 (500-1)	1160-1½ 452 (500-1½)	1260-2 552 (600-2)

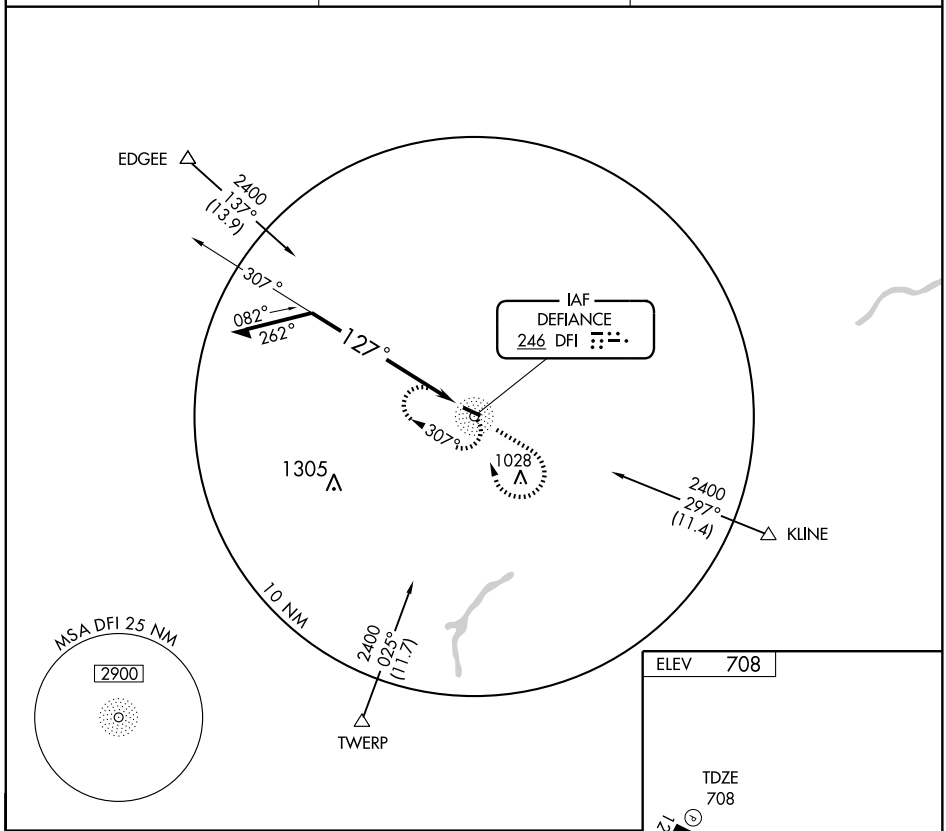
REIL Rwys 12 and 30 L
MIRL Rwy 12-30 L

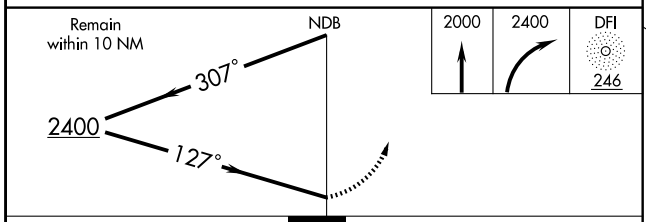
NDB DFI	APP CRS	Rwy ldg	4197
246	127°	TDZE	708
		Apt Elev	708

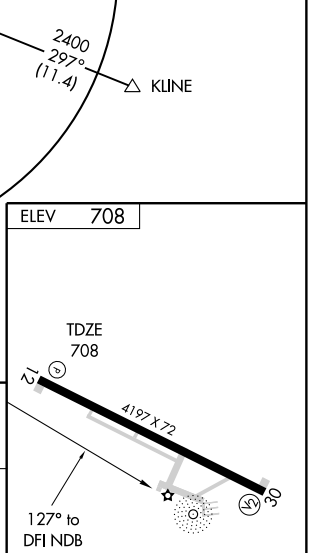
NDB RWY 12
DEFIANCE MEMORIAL (DFI)

MISSED APPROACH: Climb to 2000 then climbing right turn to 2400 direct DFI NDB and hold.

ASOS	TOLEDO APP CON	UNICOM
121.425	134.35 307.0	122.7 (CTAF) L







REIL Rwys 12 and 30 L
MIRL Rwy 12-30 L

CATEGORY	A	B	C	D
S-12	1240-1	532 (600-1)	1240-1½ 532 (600-1½)	1240-1¾ 532 (600-1¾)
CIRCLING	1240-1	532 (600-1)	1240-1½ 532 (600-1½)	1260-2 552 (600-2)

Knots	60	90	120	150	180
Min:Sec					

EC-2. 14 JAN 2010 to 11 FEB 2010

NDB DLZ	APP CRS	Rwy ldg	5000
215	108°	TDZE	944
		Apt Elev	945

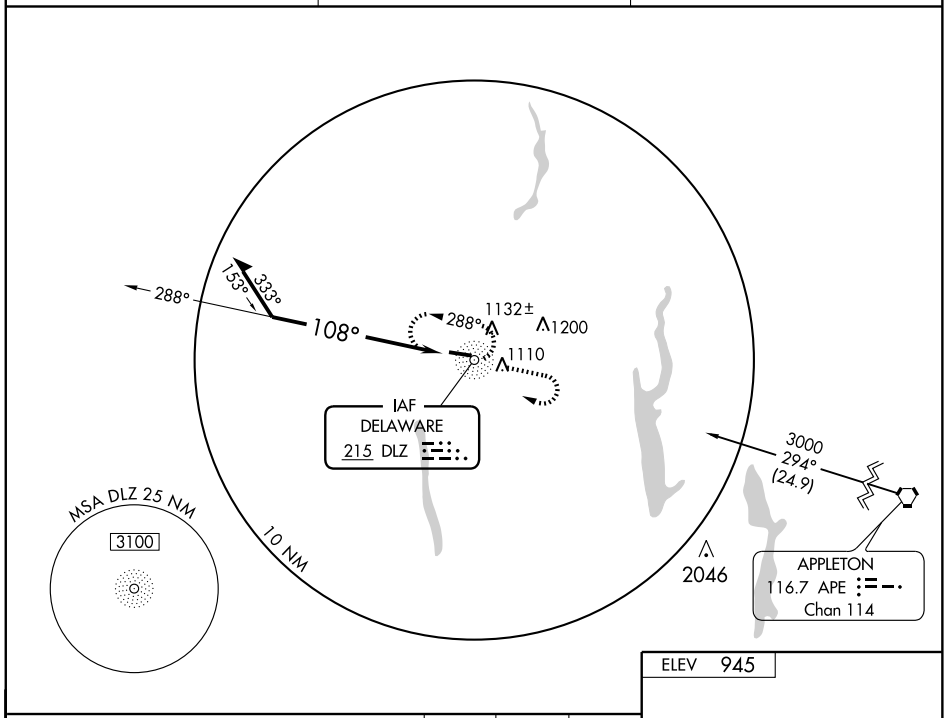
NDB RWY 10
DELAWARE MUNI (DLZ)

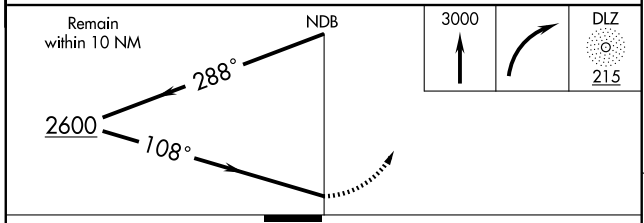
NA

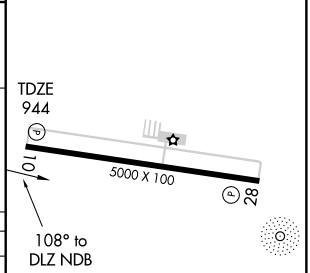
Obtain local altimeter setting on CTAF; when not received, use Port Columbus Intl altimeter setting.

MISSED APPROACH: Climb to 3000 then right turn direct DLZ NDB and hold.

AWOS-3	COLUMBUS APP CON	UNICOM
119.025	120.2 317.775	122.7 (CTAF) L







REIL Rwys 10 and 28
MIRL Rwy 10-28 L

CATEGORY	A	B	C	D
S-10	1520-1 576 (600-1)		1520-1½ 576 (600-1½)	1520-1¾ 576 (600-1¾)
CIRCLING	1520-1 576 (600-1)		1520-1½ 575 (600-1½)	1520-2 575 (600-2)
PORT COLUMBUS INTL ALTIMETER SETTING MINIMUMS				
S-10	1580-1 636 (700-1)		1580-1¾ 636 (700-1¾)	1580-2 636 (700-2)
CIRCLING	1580-1 635 (700-1)		1580-1¾ 635 (700-1¾)	1580-2 635 (700-2)

Knots	60	90	120	150	180
Min:Sec					

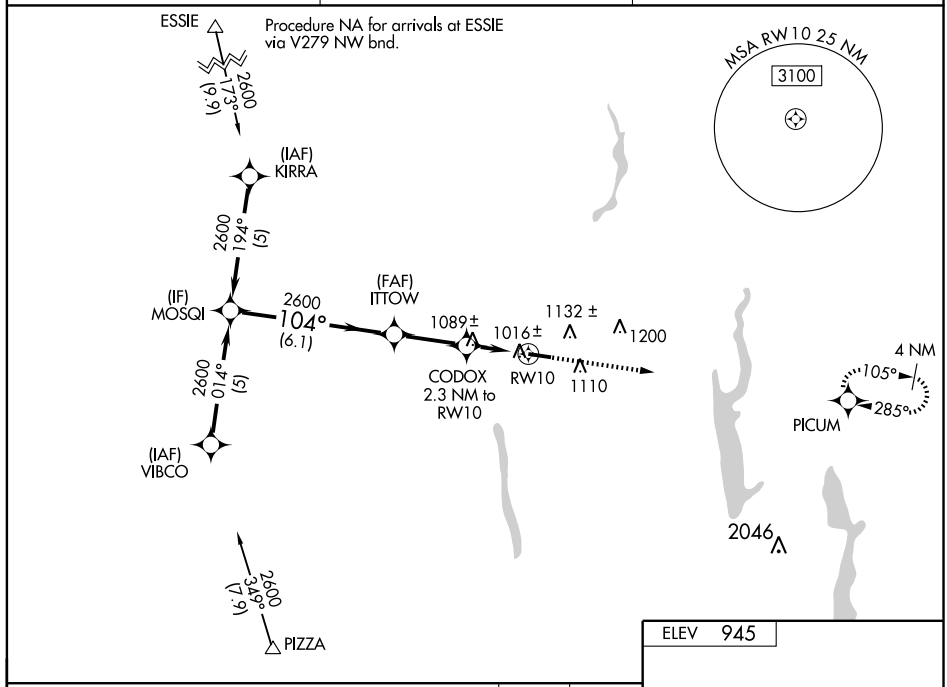
WAAS CH **90506** **W10A**	APP CRS **104°**	Rwy ldg **5000** TDZE **945** Apt Elev **945**

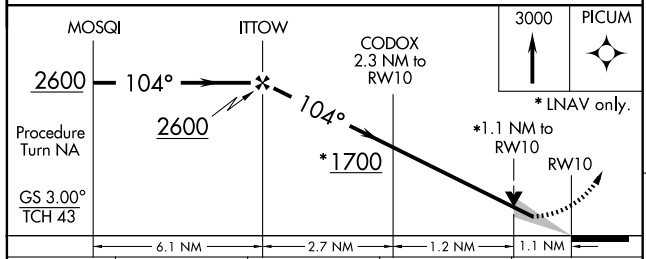
RNAV (GPS) RWY 10
DELAWARE MUNI (DLZ)

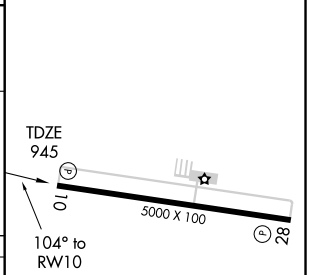
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Port Columbus Intl altimeter setting and increase all DAs 64 feet and visibility ¼ mile all Cats and all MDAs 80 feet and LNAV Cats C and D visibilities ¼ mile. Baro-VNAV and VDP NA when using Port Columbus Intl altimeter setting.

MISSED APPROACH: Climb to 3000 direct PICUM and hold.

AWOS-3	COLUMBUS APP CON	UNICOM
119.025	**120.2 317.775**	**122.7** (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1195-¾ 250 (300-¾)			
LNAV/ DA VNAV	1276-1¼ 331 (400-1¼)			
LNAV MDA	1340-1 395 (400-1)			1340-1¼ 395 (400-1¼)
CIRCLING	1460-1 515 (600-1)		1460-1½ 515 (600-1½)	1500-2 555 (600-2)

REIL Rwys 10 and 28
MIRL Rwy 10-28 L

EC-2, 14 JAN 2010 to 11 FEB 2010

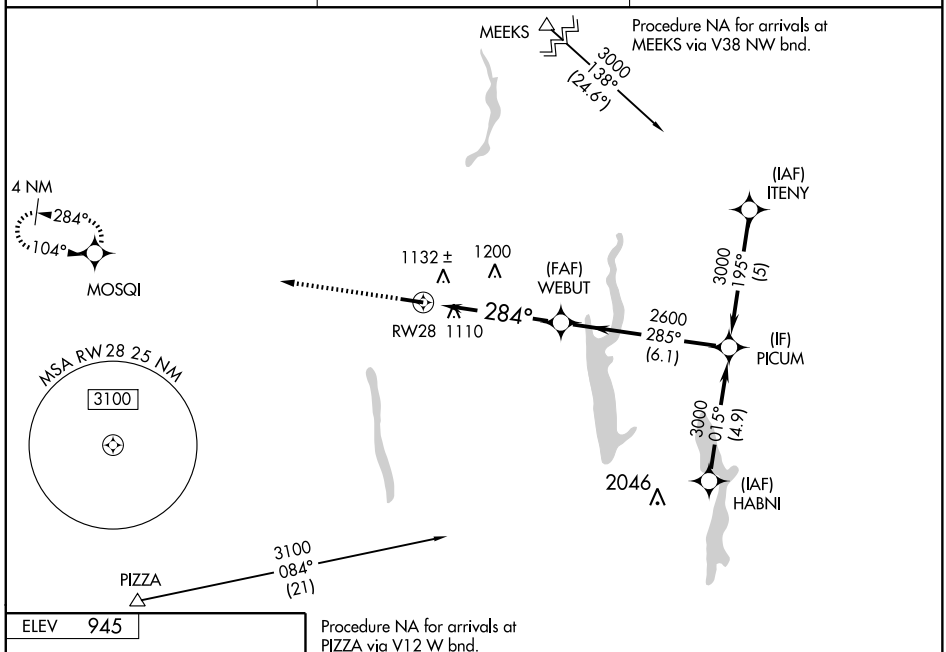
WAAS CH 50506 W28A	APP CRS 284°	Rwy ldg 5000 TDZE 945 Apt Elev 945

RNAV (GPS) RWY 28
DELAWARE MUNI (DLZ)

For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Port Columbus Intl altimeter setting and increase all DAs 64 feet and visibility ¼ mile all Cats and all MDAs 80 feet and LNAV Cats C and D visibilities ¼ mile. Baro-VNAV and VDP NA when using Port Columbus Intl altimeter setting.

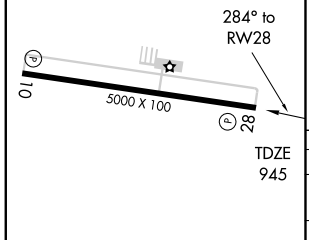
MISSED APPROACH: Climb to 2600 direct MOSQI and hold.

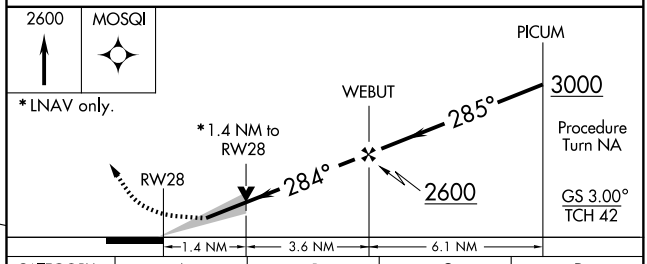
AWOS-3	COLUMBUS APP CON	UNICOM
119.025	120.2 317.775	122.7 (CTAF) L



ELEV 945

Procedure NA for arrivals at PIZZA via V12 W bnd.





* LNAV only.

CATEGORY	A	B	C	D
LPV DA	1210-1 265 (300-1)			
LNAV/ VNAV DA	1459-1¾ 514 (600-1¾)			
LNAV MDA	1420-1 475 (500-1)		1420-1¼ 475 (500-1¼)	1420-1½ 475 (500-1½)
CIRCLING	1460-1 515 (600-1)		1460-1½ 515 (600-1½)	1500-2 555 (600-2)

REIL Rwys 10 and 28
MIRL Rwy 10-28 L

VORTAC APE	APP CRS	Rwy ldg	5000
116.7	294°	TDZE	945
Chan 114		Apt Elev	945

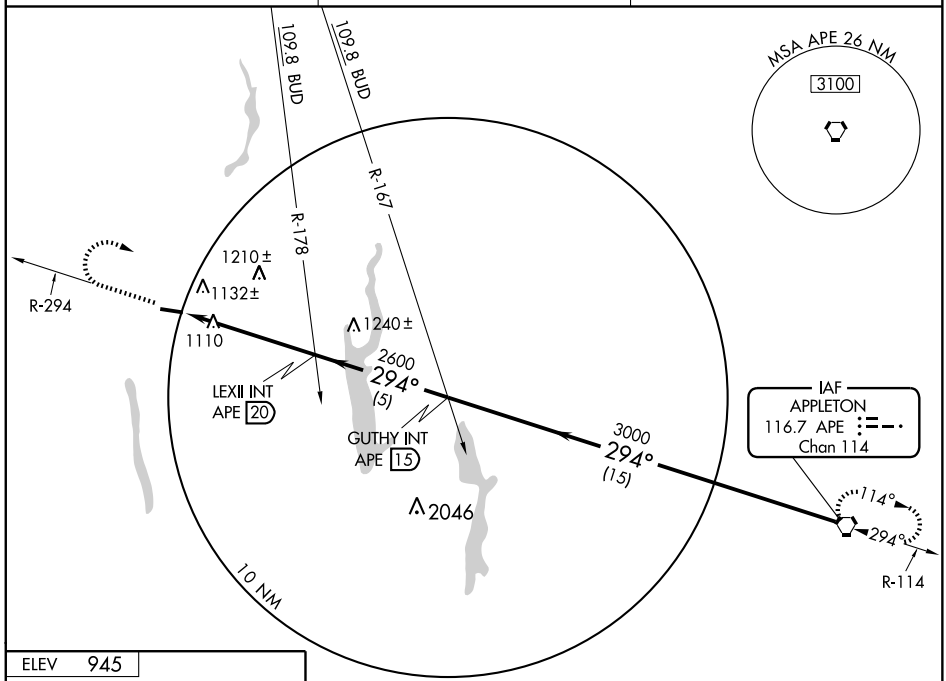
VOR RWY 28
DELAWARE MUNI (DLZ)

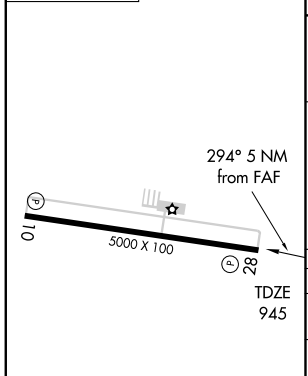
Obtain local altimeter setting on CTAF; when not received, use Port Columbus Intl altimeter setting.

NA

MISSED APPROACH: Climb to 3000 then right turn direct APE VORTAC and hold.

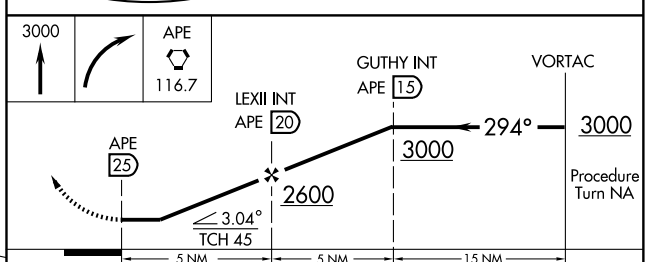
AWOS-3	COLUMBUS APP CON	UNICOM
119.025	120.2 317.775	122.7 (CTAF) L





REIL Rwys 10 and 28
MIRL Rwy 10-28 L

FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40



CATEGORY	A	B	C	D
S-28	1520-1 575 (600-1)	1520-1¼ 575 (600-¼)	1520-1½ 575 (600-½)	1520-1¾ 575 (600-¾)
CIRCLING	1520-1 575 (600-1)	1520-1¼ 575 (600-1¼)	1520-1½ 575 (600-1½)	1520-2 575 (600-2)
PORT COLUMBUS INTL ALTIMETER SETTING MINIMUMS				
S-28	1580-1 635 (700-1)	1580-1¼ 635 (700-1¼)	1580-1¾ 635 (700-1¾)	1580-2 635 (700-2)
CIRCLING	1580-1 635 (700-1)	1580-1¼ 635 (700-1¼)	1580-1¾ 635 (700-1¾)	1580-2 635 (700-2)

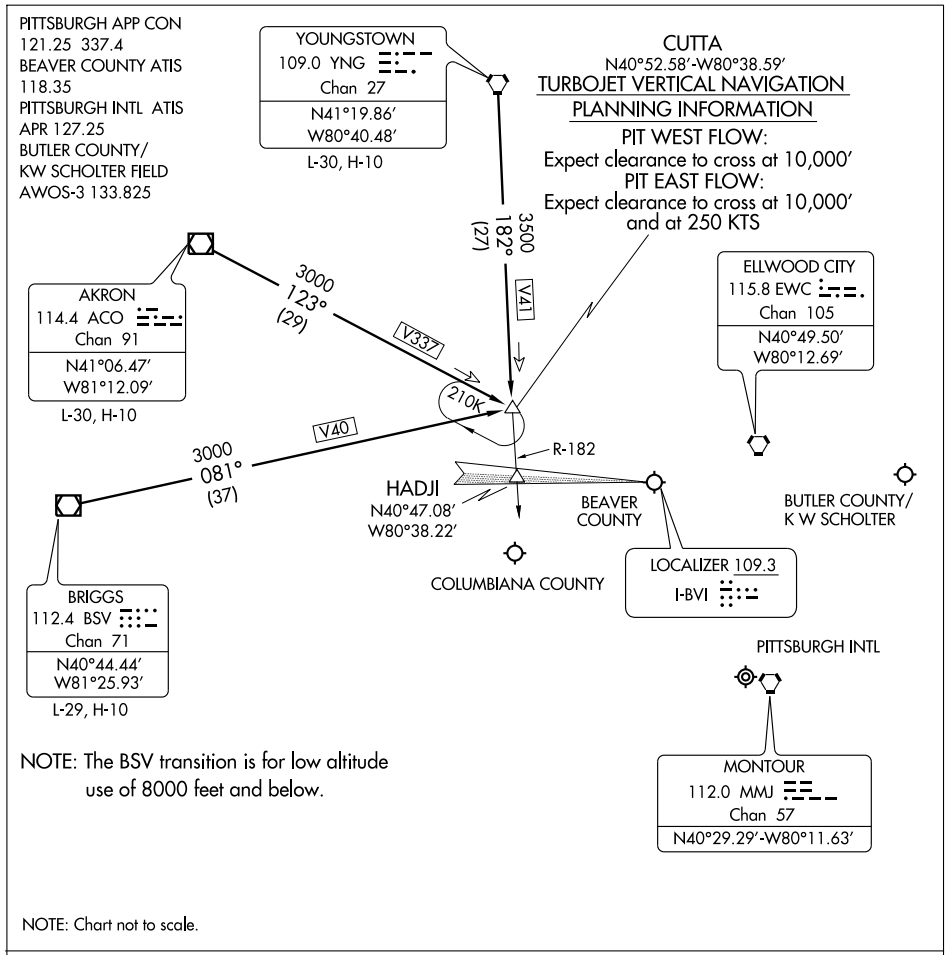
EC-2, 14 JAN 2010 to 11 FEB 2010

(CUTTA.CUTTA2) 09239

CUTTA TWO ARRIVAL

ST-570 (FAA)

PITTSBURGH, PENNSYLVANIA



AKRON TRANSTION (ACO.CUTTA2): From over ACO VOR/DME via ACO R-123 to CUTTA INT. Thence. . . .

BRIGGS TRANSITION (BSV.CUTTA2): From over BSV VOR/DME via BSV R-081 to CUTTA INT. Thence. . . .

YOUNGSTOWN TRANSITION (YNG.CUTTA2): From over YNG VORTAC via YNG R-182 to CUTTA INT. Thence. . . .

. . . . From over CUTTA INT:

PIT arrivals expect radar vectors.

BVI (EAST FLOW) direct HADJI

(WEST FLOW) direct EWC

BTP and 02G direct EWC

NE-4, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	3503
249°	TDZE	1160
	Apt Elev	1160

GPS RWY 25

EAST LIVERPOOL/COLUMBIANA COUNTY (Q2G)

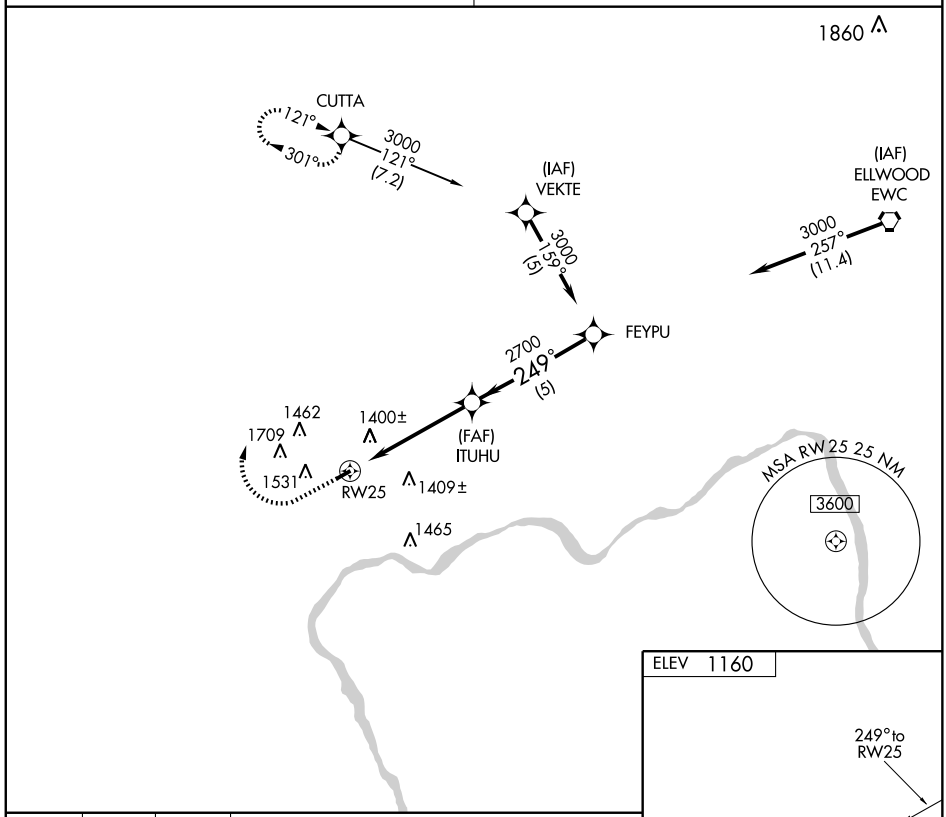
NA

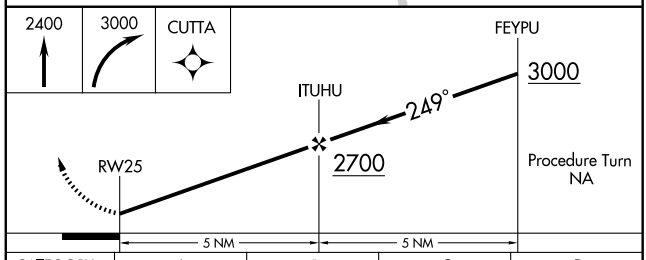
Use Pittsburgh Intl altimeter setting.

MISSED APPROACH: Climb to 2400 then climbing right turn to 3000 direct CUTTA WP and hold.

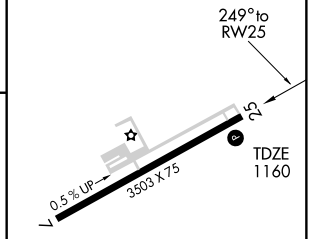
PITTSBURGH APP CON
124.75 338.2

UNICOM
123.0 (CTAF) L





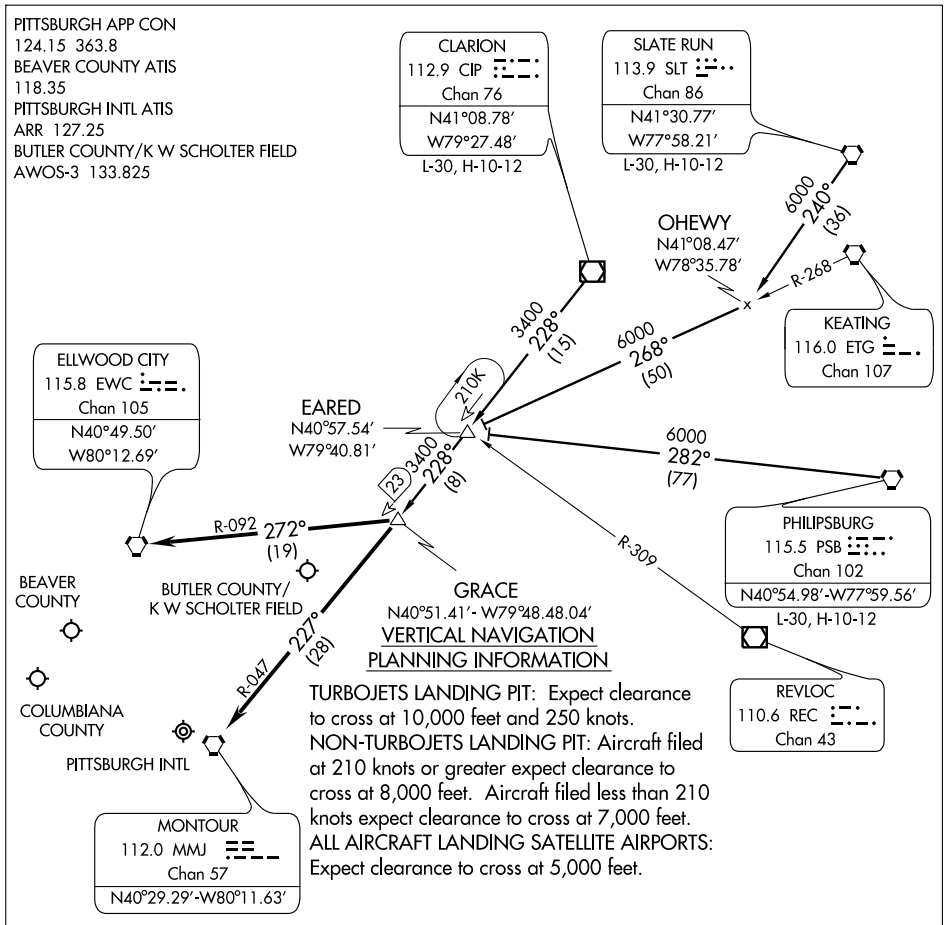
CATEGORY	A	B	C	D
S-25	1760-1 600 (600-1)		1760-1½ 600 (600-1½)	NA
CIRCLING	1920-1 760 (800-1)	1920-1¼ 760 (800-1¼)	1920-2¼ 760 (800-2¼)	NA



REIL Rwy 25 L
MIRL Rwy 7-25 L

GRACE TWO ARRIVAL

PITTSBURGH, PENNSYLVANIA



VERTICAL NAVIGATION PLANNING INFORMATION

TURBOJETS LANDING PIT: Expect clearance to cross at 10,000 feet and 250 knots.
NON-TURBOJETS LANDING PIT: Aircraft filed at 210 knots or greater expect clearance to cross at 8,000 feet. Aircraft filed less than 210 knots expect clearance to cross at 7,000 feet.
ALL AIRCRAFT LANDING SATELLITE AIRPORTS: Expect clearance to cross at 5,000 feet.

NOTE: Chart not to scale.

ARRIVAL DESCRIPTION

CLARION TRANSITION (CIP.GRACE2): From over CIP VOR/DME via CIP R-228 to GRACE INT. Thence....

PHILIPSBURG TRANSITION (PSB.GRACE2): From over PSB VORTAC via PSB R-282 to EARED INT, then via CIP R-228 to GRACE INT. Thence....

SLATE RUN TRANSITION (SLT.GRACE2): From over SLT VORTAC via SLT R-240 to ETG R-268 to EARED INT, then via CIP R-228 to GRACE INT. Thence....

....From over GRACE INT:

Direct MMJ, direct Pittsburgh Intl. Expect vectors after Grace Int.
Direct EWC, direct Beaver County.
Direct EWC, direct Bulter County/K W Scholter Field.
Direct EWC, direct Columbiana County.

VORTAC EWC	APP CRS	Rwy ldg	3503
115.8	253°	TDZE	1160
Chan 105		Apt Elev	1160

VOR RWY 25

EAST LIVERPOOL/COLUMBIANA COUNTY (Q2G)

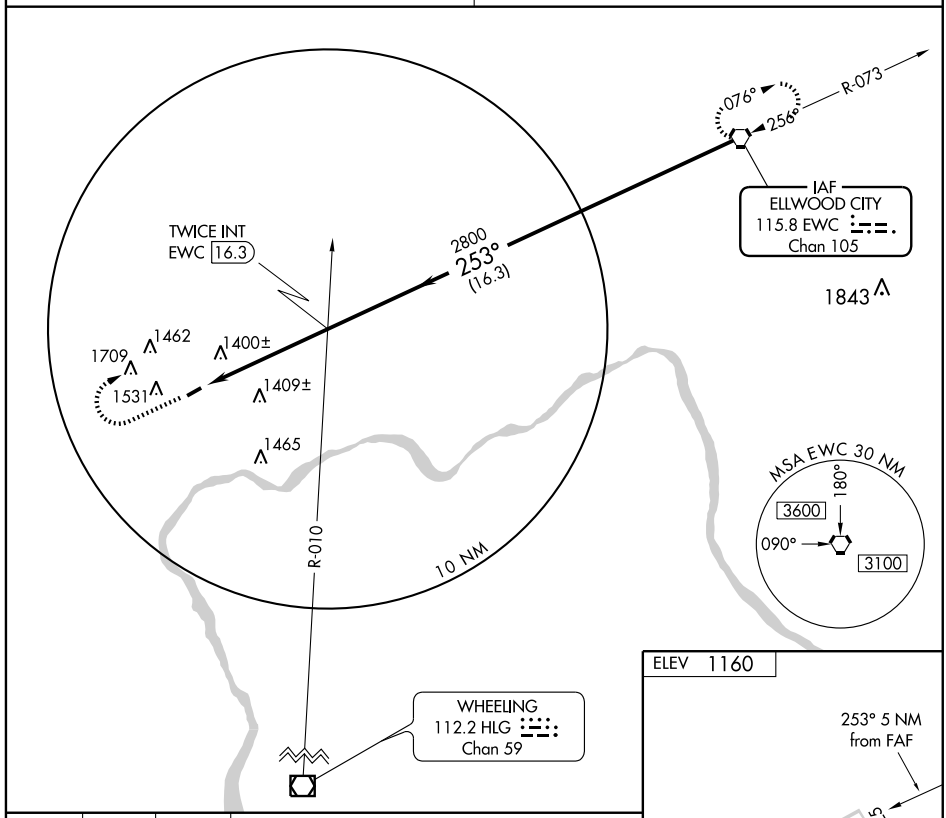
T
A NA

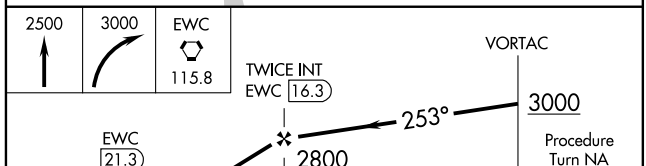
Use Pittsburgh Intl altimeter setting.

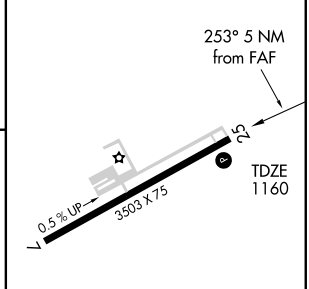
MISSED APPROACH: Climb to 2500 then climbing right turn to 3000 direct EWC VORTAC and hold.

PITTSBURGH APP CON
124.75 338.2

UNICOM
123.0 (CTAF) L







REIL Rwy 25 L
MIRL Rwy 7-25 L

CATEGORY	A	B	C	D
S-25	1840-1 680 (700-1)	1840-1¼ 680 (700-1¼)	1840-2 680 (700-2)	NA
CIRCLING	1940-1 780 (800-1)	1940-1¼ 780 (800-1¼)	1940-2¼ 780 (800-2¼)	NA

FAF to MAP 5 NM

Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

EC-2, 14 JAN 2010 to 11 FEB 2010

CLEVELAND DEP CON
126.35 346.32

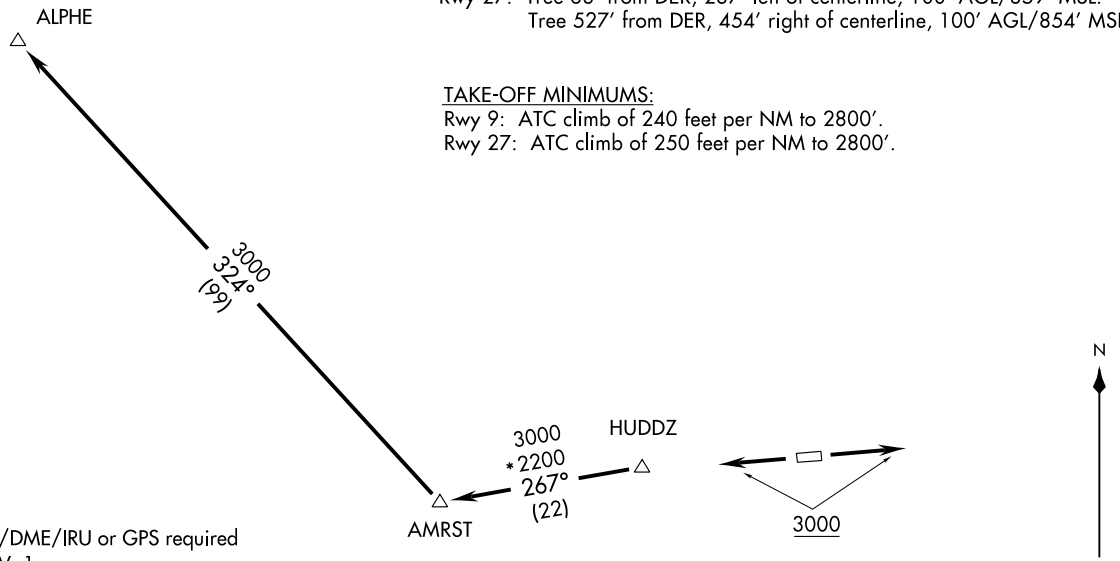
DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 9, 27: Climb via assigned heading to 3000 thence. . . .

. . . . or assigned altitude for radar vectors to HUDDZ, then via 267° track to AMRST, then via 324° track to ALPHE. Expect filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES:
Rwy 9: Road 1198′ from DER, 275′ left of centerline, 15′ AGL/774′ MSL.
Tree 2077′ from DER, 778′ right of centerline, 100′ AGL/859′ MSL.
Rwy 27: Tree 68′ from DER, 237′ left of centerline, 100′ AGL/859′ MSL.
Tree 527′ from DER, 454′ right of centerline, 100′ AGL/854′ MSL.

TAKE-OFF MINIMUMS:
Rwy 9: ATC climb of 240 feet per NM to 2800′.
Rwy 27: ATC climb of 250 feet per NM to 2800′.



NOTE: DME/DME/IRU or GPS required
NOTE: RNAV 1
NOTE: RADAR REQUIRED

NOTE: Chart not to scale.

(ALPHE2.ALPHE) 09127

ALPHE TWO DEPARTURE (RNAV)

SL-5333 (FAA)

ELYRIA (1G1)
ELYRIA, OHIO

CLEVELAND DEP CON
126.35 346.325

TAKE-OFF MINIMUMS:
Rwys 9, 27: STANDARD.

NOTE: RADAR REQUIRED

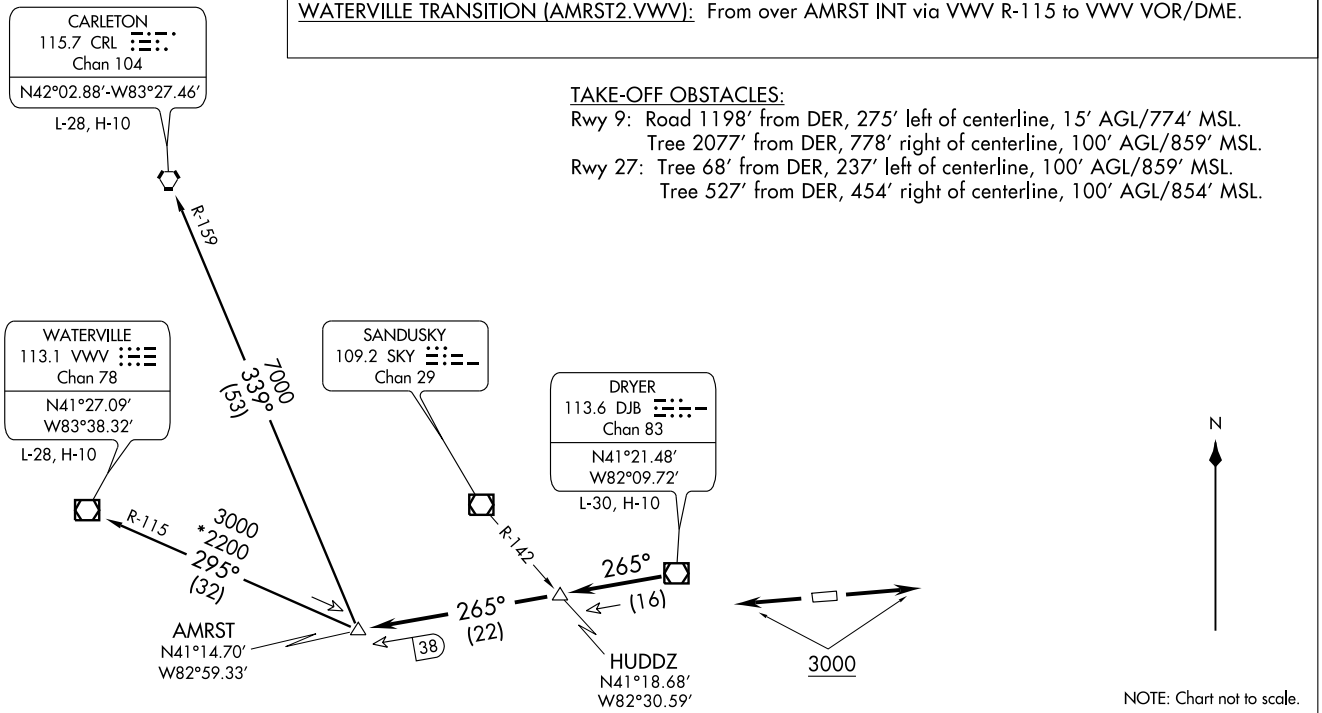
DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 9, 27: Climb via assigned heading to 3000 thence. . . .

. . . . or assigned altitude for vectors to intercept the DJB VOR/DME R-265 to AMRST INT then via (Transition). Expect filed altitude/flight level ten (10) minutes after departure.

CARLETON TRANSITION (AMRST2.CRL): From over AMRST INT via CRL R-159 to CRL VORTAC.
WATERVILLE TRANSITION (AMRST2.VWV): From over AMRST INT via VWV R-115 to VWV VOR/DME.

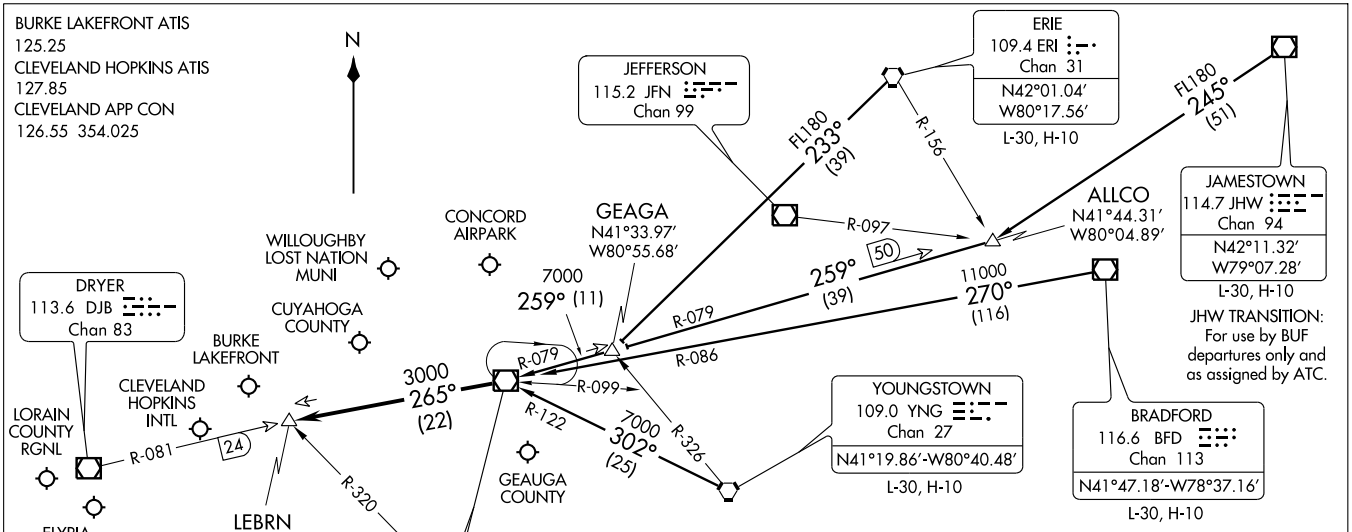
TAKE-OFF OBSTACLES:
Rwy 9: Road 1198′ from DER, 275′ left of centerline, 15′ AGL/774′ MSL.
Tree 2077′ from DER, 778′ right of centerline, 100′ AGL/859′ MSL.
Rwy 27: Tree 68′ from DER, 237′ left of centerline, 100′ AGL/859′ MSL.
Tree 527′ from DER, 454′ right of centerline, 100′ AGL/854′ MSL.



NOTE: Chart not to scale.

(AMRST2.AMRST) 09183
AMRST TWO DEPARTURE
SL-5333 (FAA)
ELYRIA (1G1)
ELYRIA, OHIO

CHARDON TWO ARRIVAL



VERTICAL NAVIGATION PLANNING INFORMATION

TURBOJETS: Expect clearance to cross at 10,000′ and 250 Kts.
PROPS: Expect clearance to cross at 9000′.

NOTE: RADAR Required.

NOTE: Chart not to scale.

ARRIVAL ROUTE DESCRIPTION

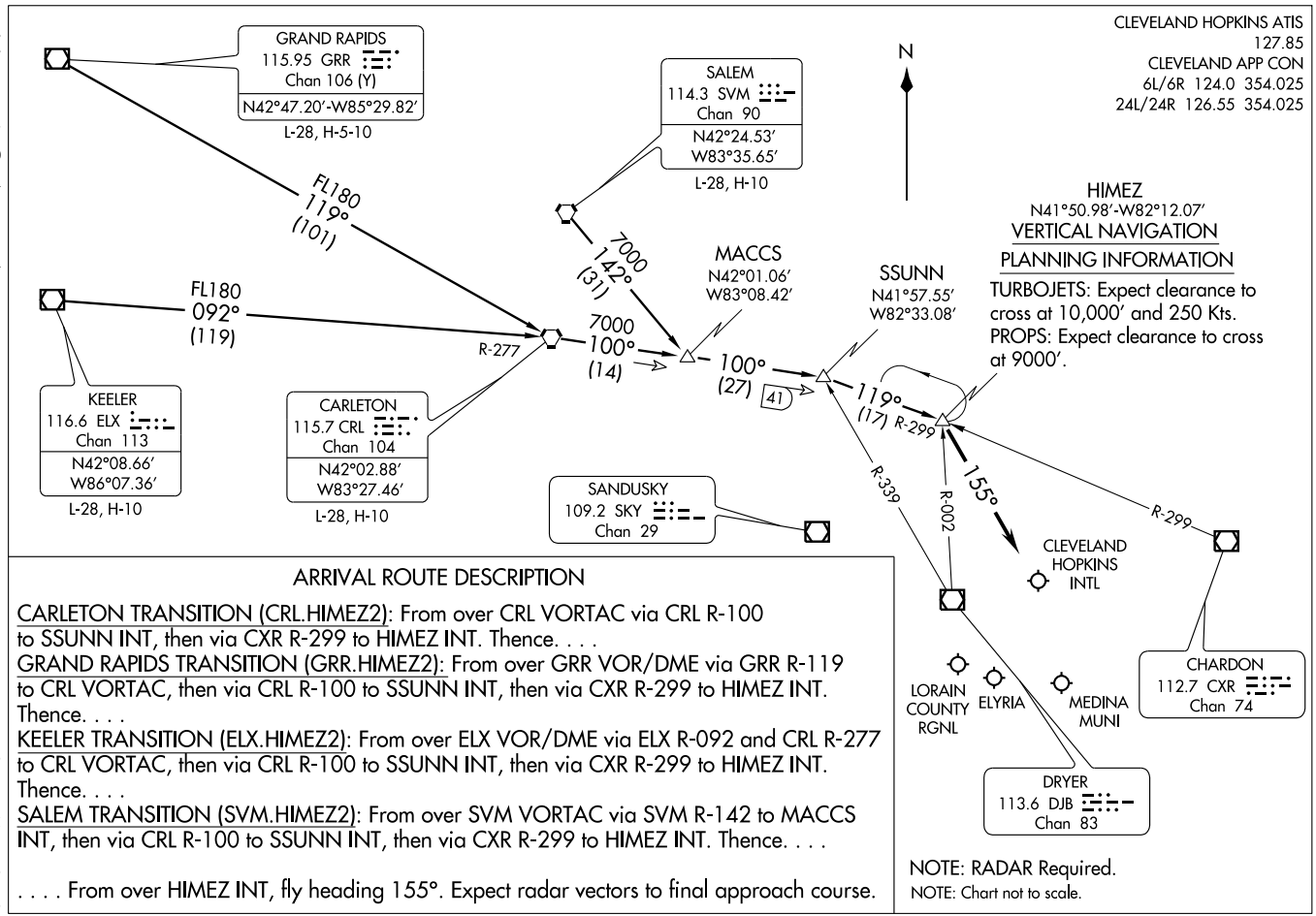
BRADFORD TRANSITION (BFD.CXR2): From over BFD VOR/DME via BFD R-270 and CXR R-086 to CXR VOR/DME. Thence . . . .

ERIE TRANSITION (ERI.CXR2): From over ERI VORTAC via ERI R-233 to GEAGA INT, then via CXR R-079 to CXR VOR/DME. Thence . . . .

JAMESTOWN TRANSITION (JHW.CXR2): (For use by BUF departures only and as assigned by ATC) From over JHW VOR/DME via JHW R-245 to ALLCO INT, then via CXR R-079 to CXR VOR/DME. Thence . . . .

YOUNGSTOWN TRANSITION (YNG.CXR2): From over YNG VORTAC via YNG R-302 and CXR R-122 to CXR VOR/DME. Thence . . . .

. . . . From CXR VOR/DME via R-265 to LEBRN INT, expect vectors to final approach course.



ARRIVAL ROUTE DESCRIPTION

CARLETON TRANSITION (CRL.HIMEZ2): From over CRL VORTAC via CRL R-100 to SSUNN INT, then via CXR R-299 to HIMEZ INT. Thence. . . .

GRAND RAPIDS TRANSITION (GRR.HIMEZ2): From over GRR VOR/DME via GRR R-119 to CRL VORTAC, then via CRL R-100 to SSUNN INT, then via CXR R-299 to HIMEZ INT. Thence. . . .

KEELER TRANSITION (ELX.HIMEZ2): From over ELX VOR/DME via ELX R-092 and CRL R-277 to CRL VORTAC, then via CRL R-100 to SSUNN INT, then via CXR R-299 to HIMEZ INT. Thence. . . .

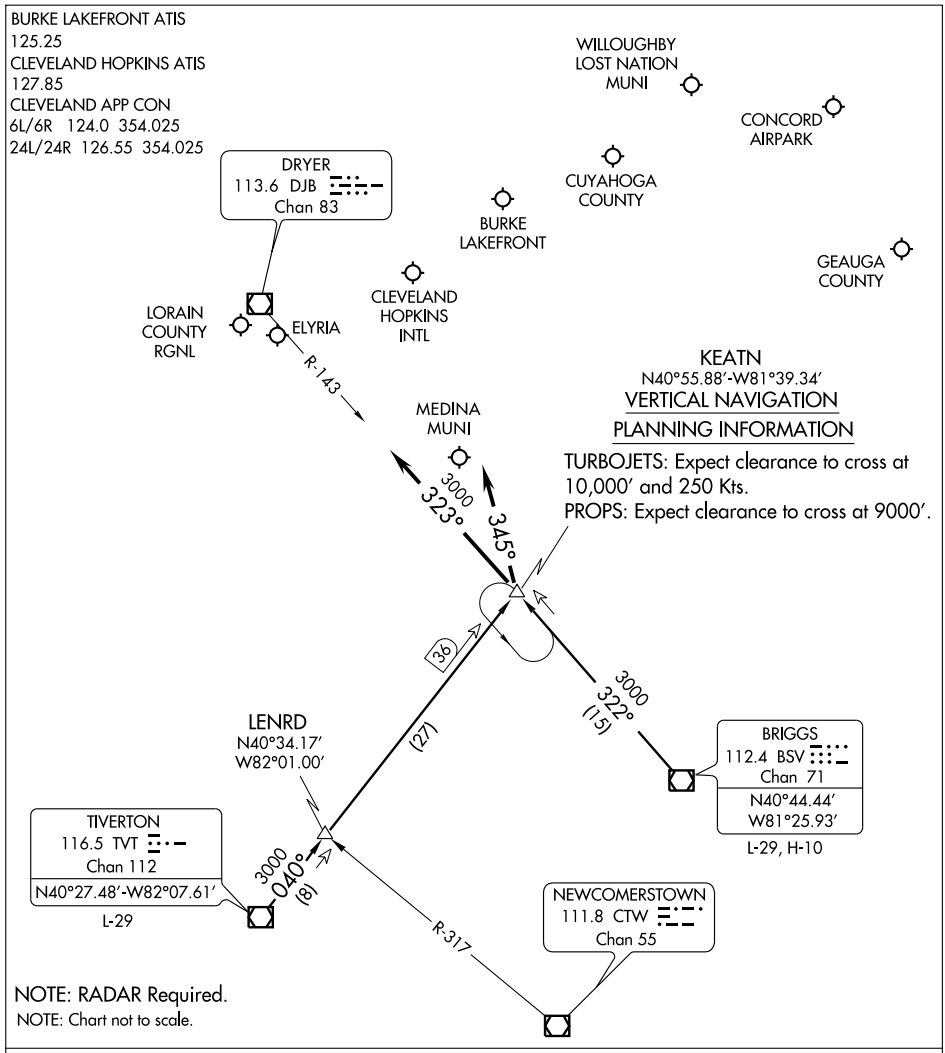
SALEM TRANSITION (SVM.HIMEZ2): From over SVM VORTAC via SVM R-142 to MACCS INT, then via CRL R-100 to SSUNN INT, then via CXR R-299 to HIMEZ INT. Thence. . . .

. . . . From over HIMEZ INT, fly heading 155°. Expect radar vectors to final approach course.

KEATN FOUR ARRIVAL

ST-84 (FAA)

CLEVELAND, OHIO



ARRIVAL ROUTE DESCRIPTION

BRIGGS TRANSITION (BSV.KEATN4): From over BSV VOR/DME via BSV R-322 to KEATN INT. Thence. . . .
TIVERTON TRANSITION (TVT.KEATN4): From over TVT VOR/DME via TVT R-040 to KEATN INT. Thence. . . .

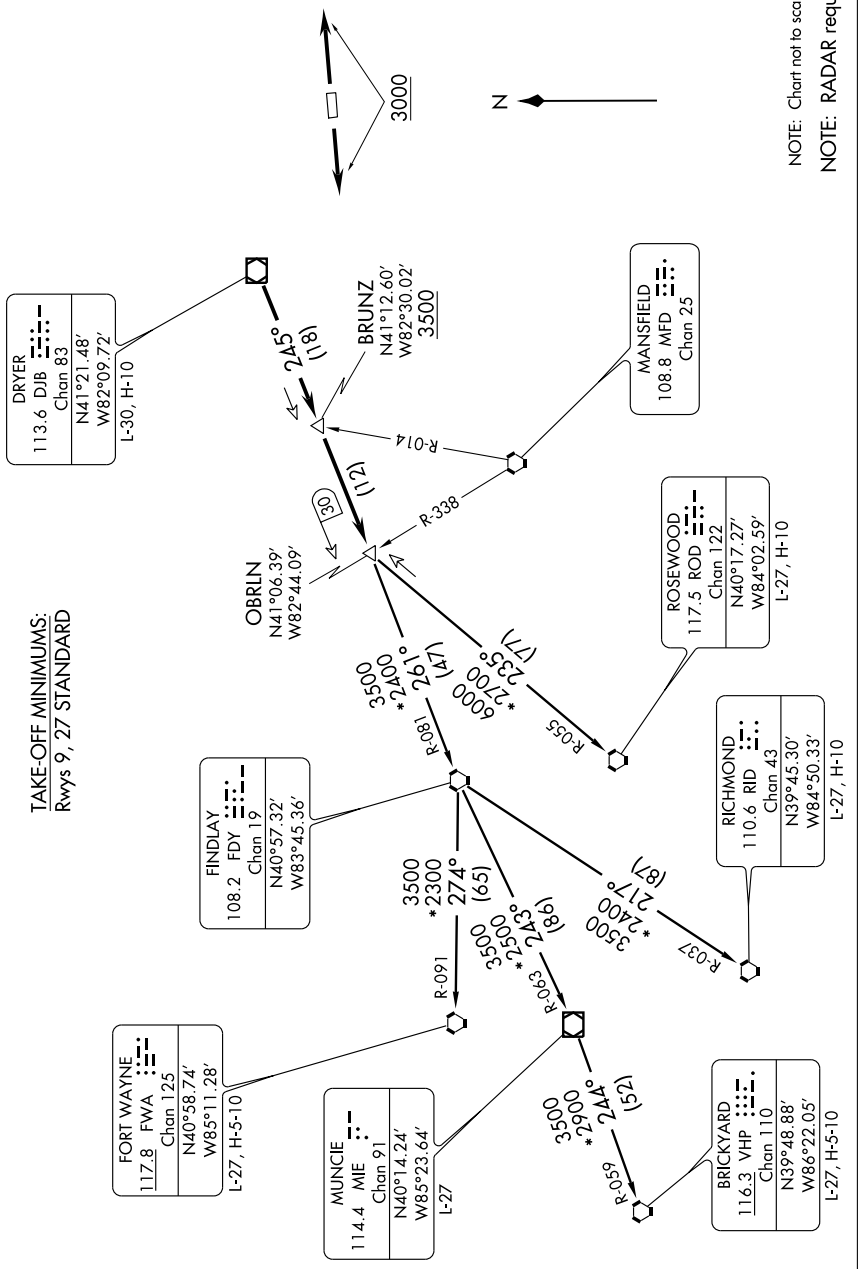
LANDING CLE RWY 24L/R: . . . .Depart KEATN INT heading 345°. Expect radar vectors to final approach course.
LANDING CLE RWY 6L/R: . . . .Depart KEATN INT via DJB R-143 to DJB VOR/DME. Expect radar vectors to final approach course.
LANDING ALL OTHER AIRPORTS: . . . .From KEATN INT expect radar vectors to final approach course.

EC-2, 14 JAN 2010 to 11 FEB 2010

OBRLN TWO DEPARTURE

ELYRIA (1G1)
ELYRIA, OHIO

(NARRATIVE ON FOLLOWING PAGE)



CLEVELAND DEP CON
126.35 346.325

OBRLN TWO DEPARTURE

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 9, 27: Climb via assigned heading to 3000 thence. . . .

. . . . or assigned altitude for vectors to intercept DJB VOR/DME R-245, cross BRUNZ INT at or above 3500 then proceed to OBRLN INT then via (transition). Expect filed altitude/flight level ten (10) minutes after departure.

BRICKYARD TRANSITION (OBRLN2.VHP): From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-243 and MIE R-063 to MIE VOR/DME, then via MIE R-244 and VHP R-059 to VHP VORTAC.
FORT WAYNE TRANSITION (OBRLN2.FWA): (For use by Fort Wayne arrivals only and ATC use as assigned.) From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-274 and FWA R-091 to FWA VORTAC.
MUNCIE TRANSITION (OBRLN2.MIE): (For use by Indianapolis arrivals only and ATC use as assigned). From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-243 and MIE R-063 to MIE VOR/DME.
RICHMOND TRANSITION (OBRLN2.RID): From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-217 and RID R-037 to RID VORTAC.
ROSEWOOD TRANSITION (OBRLN2.ROD): (For use at or below FL220 only and ATC use as assigned). From over OBRLN INT via ROD R-055 to ROD VORTAC.

TAKE-OFF OBSTACLES:
Rwy 9: Road 1198′ from DER, 275′ left of centerline, 15′ AGL/774′ MSL.
Tree 2077′ from DER, 778′ right of centerline, 100′ AGL/859′ MSL.
Rwy 27: Tree 68′ from DER, 237′ left of centerline, 100′ AGL/859′ MSL.
Tree 527′ from DER, 454′ right of centerline, 100′ AGL/854′ MSL.

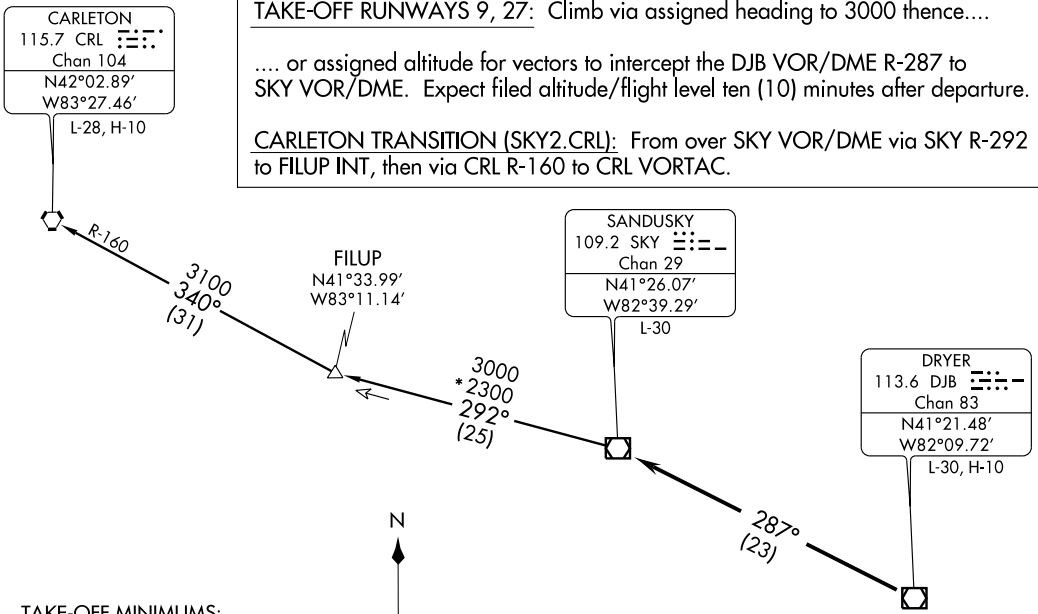
CLEVELAND DEP CON
126.35 346.325

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 9, 27: Climb via assigned heading to 3000 thence....

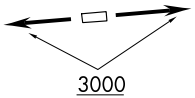
.... or assigned altitude for vectors to intercept the DJB VOR/DME R-287 to SKY VOR/DME. Expect filed altitude/flight level ten (10) minutes after departure.

CARLETON TRANSITION (SKY2.CRL): From over SKY VOR/DME via SKY R-292 to FILUP INT, then via CRL R-160 to CRL VORTAC.



TAKE-OFF MINIMUMS:
Rwy 9, 27 STANDARD

TAKE-OFF OBSTACLES:
Rwy 9: Road 1198′ from DER, 275′ left of centerline, 15′ AGL/774′ MSL.
Tree 2077′ from DER, 778′ right of centerline, 100′ AGL/859′ MSL.
Rwy 27: Tree 68′ from DER, 237′ left of centerline, 100′ AGL/859′ MSL.
Tree 527′ from DER, 454′ right of centerline, 100′ AGL/854′ MSL.



NOTE: RADAR required
NOTE: Turboprop aircraft only

NOTE: Chart not to scale.

VOR/DME DJB 113.6 Chan 83	APP CRS 125°	Rwy ldg N/A TDZE N/A Apt Elev 760

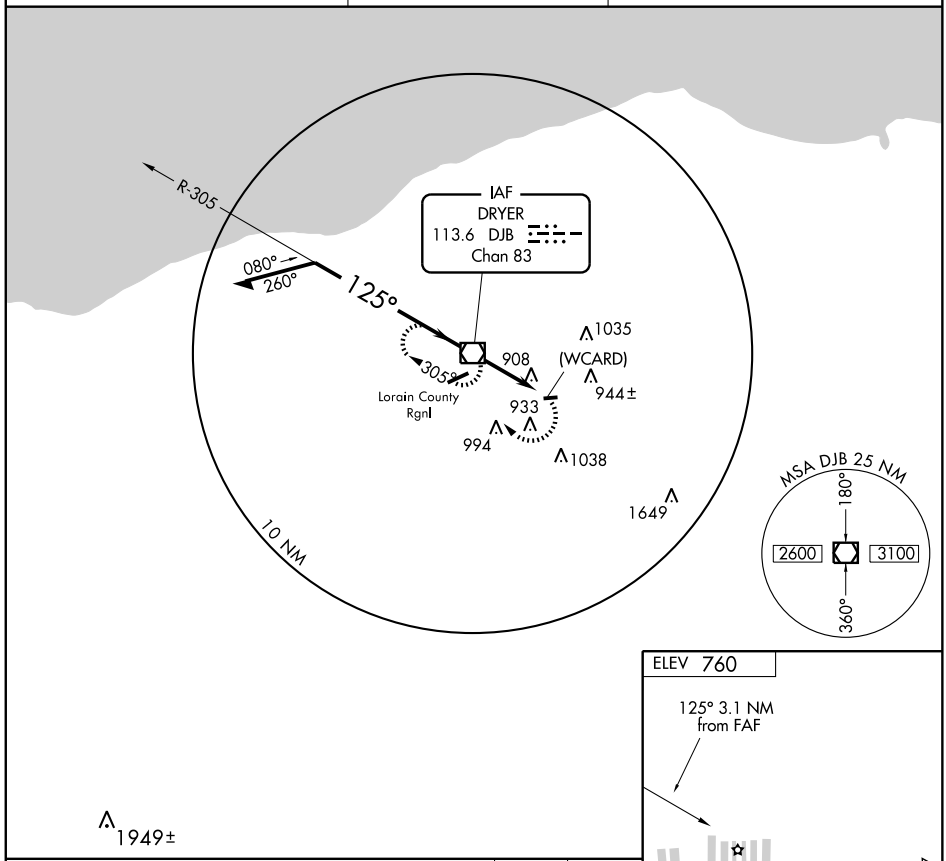
VOR or GPS-A
ELYRIA (1G1)

NA

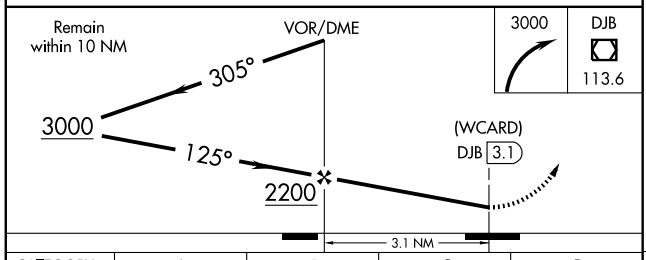
Use Cleveland Hopkins Intl altimeter setting.

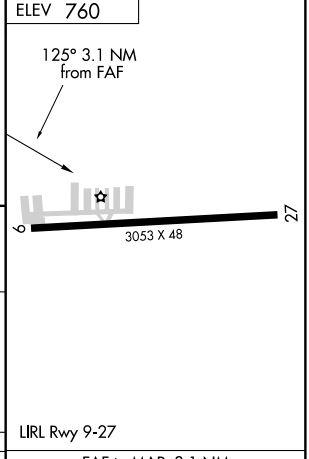
MISSED APPROACH: Climbing right turn to 3000 direct DJB VOR/DME and hold.

CLEVELAND APP CON	CLNC DEL	UNICOM
126.35 354.025	125.7	122.8 (CTAF)



1949±





LIRL Rwy 9-27

CATEGORY	A	B	C	D
CIRCLING	1220-1 460 (500-1)		1260-1½ 500 (500-1½)	NA

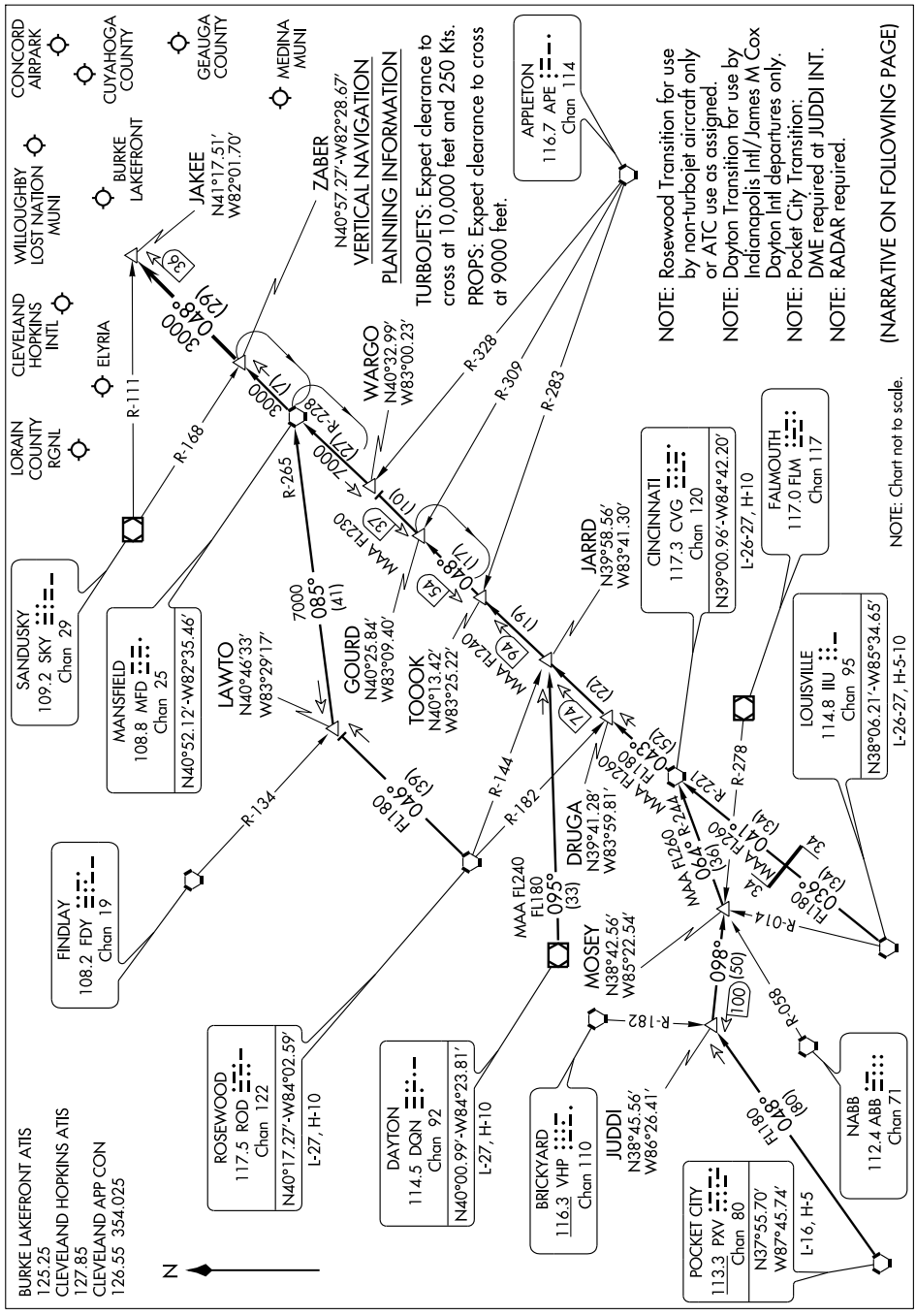
FAF to MAP 3.1 NM

Knots	60	90	120	150	180
Min:Sec	3:06	2:04	1:33	1:14	1:02

ZABER ONE ARRIVAL

ST-84 (FAA)

CLEVELAND, OHIO



ARRIVAL ROUTE DESCRIPTION

CINCINNATI TRANSITION (CVG.ZABER1): From over CVG VORTAC via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

DAYTON TRANSITION (DQN.ZABER1): (For use by INDIANAPOLIS INTL/JAMES M COX DAYTON INTL departures only). From over DQN VOR/DME via DQN R-095 to JARRD INT, then via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

LOUISVILLE TRANSITION (IIU.ZABER1): From over IIU VORTAC via IIU R-036 and CVG R-221 to CVG VORTAC, then via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

POCKET CITY TRANSITION (PXV.ZABER1): (DME REQUIRED at JUDDI INT) From over PXV VORTAC via PXV R-048 to JUDDI INT, then via FLM R-278 to MOSEY INT, then via CVG R-244 to CVG VORTAC, then via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

ROSEWOOD TRANSITION (ROD.ZABER1): (For use by non-turbo aircraft only or ATC use as assigned). From over ROD VORTAC via ROD R-046 to LAWTO INT, then via MFD R-265 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

. . . . From over ZABER INT via MFD R-048 to JAKEE INT. Expect radar vectors to final approach course.

EC-2, 14 JAN 2010 to 11 FEB 2010

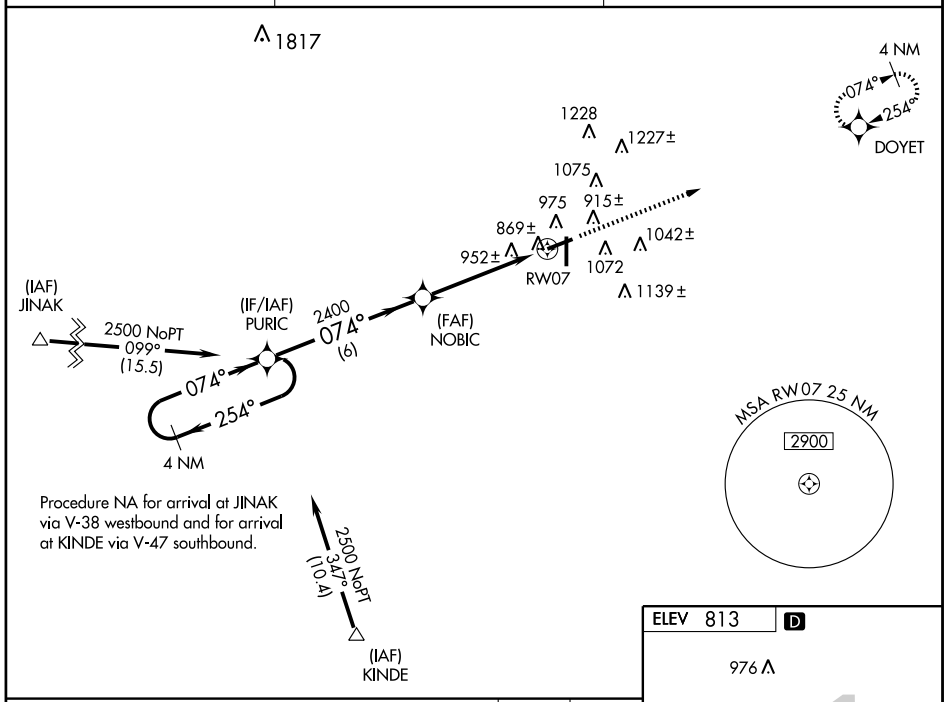
APP CRS	Rwy ldg	4558
074°	TDZE	809
	Apt Elev	813

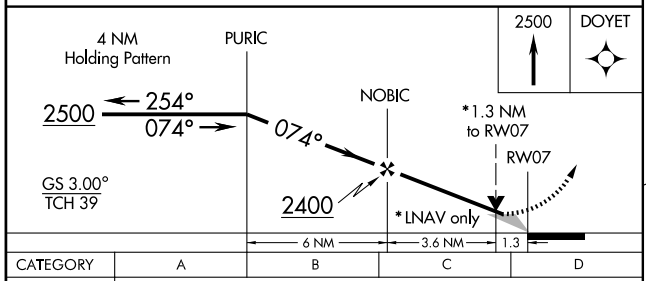
RNAV (GPS) RWY 7
FINDLAY (FDY)

GPS or RNP-0.3 required. DME/DME RNP-0.3 NA.
Baro-VNAV NA below -16°C (4°F)
If local altimeter setting not received, use Lima Allen County altimeter setting and increase DA to 1280 feet, increase all MDAs 80 feet.
Baro-VNAV and VDP NA with Lima Allen County altimeter setting.

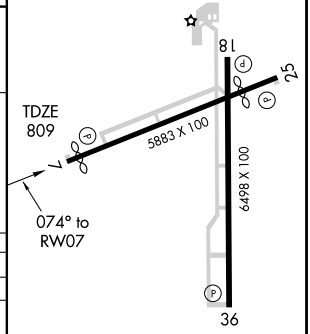
MISSED APPROACH: Climb to 2500 direct DOYET WP and hold.

ASOS	TOLEDO APP CON	UNICOM
124.425	120.8 317.55	122.725 (CTAF) L





CATEGORY	A	B	C	D
GLS PA DA	NA			
LNAV/ VNAV DA	1200-1½ 391 (400-1½)			
LNAV MDA	1260-1 451 (500-1)		1260-1¼ 451 (500-1¼)	1260-1½ 451 (500-1½)
CIRCLING	1440-1½ 627 (700-1½)		1440-1¾ 627 (700-1¾)	1440-2 627 (700-2)



HIRL Rwys 18-36 and 7-25 L
REIL Rwys 7, 18, 25 and 36 L

EC-2, 14 JAN 2010 to 11 FEB 2010

WAAS CH **70405** **W18A**	APP CRS **185°**	Rwy ldg **6498** TDZE **813** Apt Elev **813**

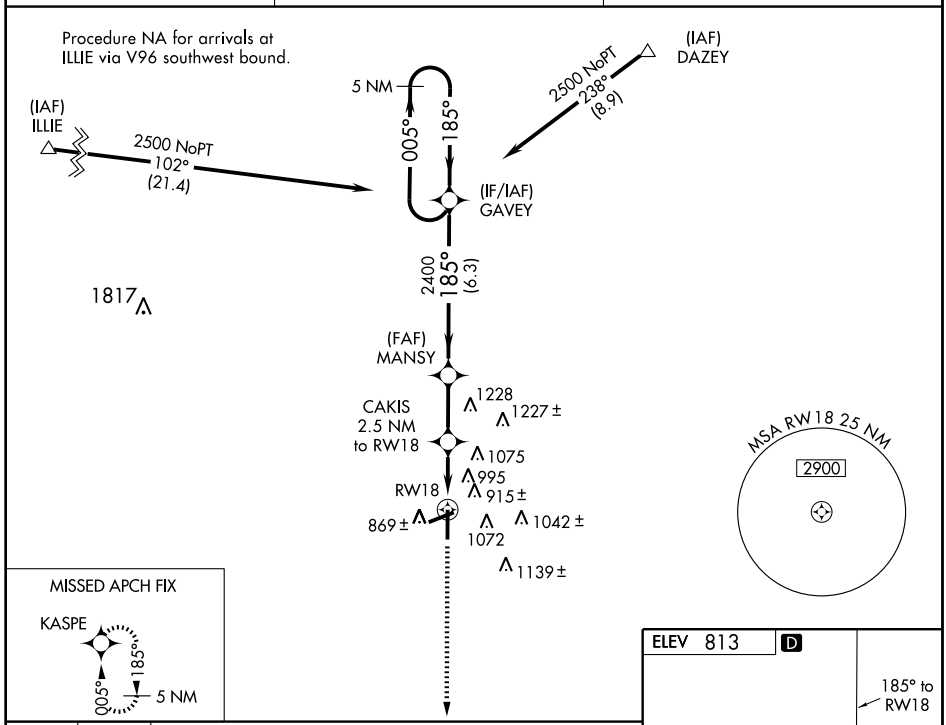
RNAV (GPS) RWY 18

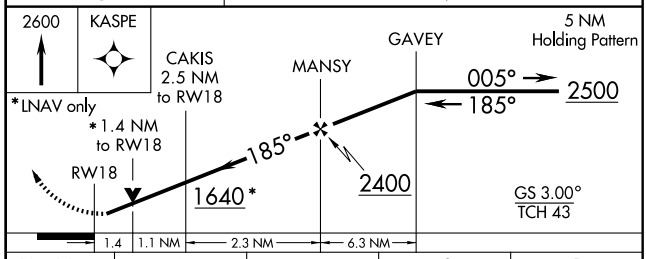
FINDLAY (FDY)

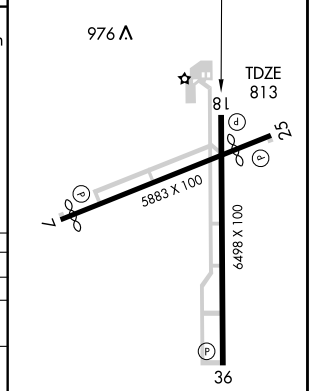
If local altimeter setting not received, use Lima Allen County altimeter setting and increase all DAs/MDAs 80 feet. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F).
VDP and Baro-VNAV NA when using Lima Allen County altimeter setting.
Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2600 direct KASPE and hold.

ASOS	TOLEDO APP CON	UNICOM
124.425	**120.8 317.55**	**122.725** (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1063-1 250 (300-1)			
LNAV/ VNAV DA	1320-1¾ 507 (600-1¾)			
LNAV MDA	1300-1 487 (500-1)		1300-1¼ 487 (500-1¼)	1300-1½ 487 (500-1½)
CIRCLING	1440-1 627 (700-1)		1440-1¾ 627 (700-1¾)	1440-2 627 (700-2)

HIRL Rwys 18-36 and 7-25 L
REIL Rwys 7, 18, 25 and 36 L

EC-2. 14 JAN 2010 to 11 FEB 2010

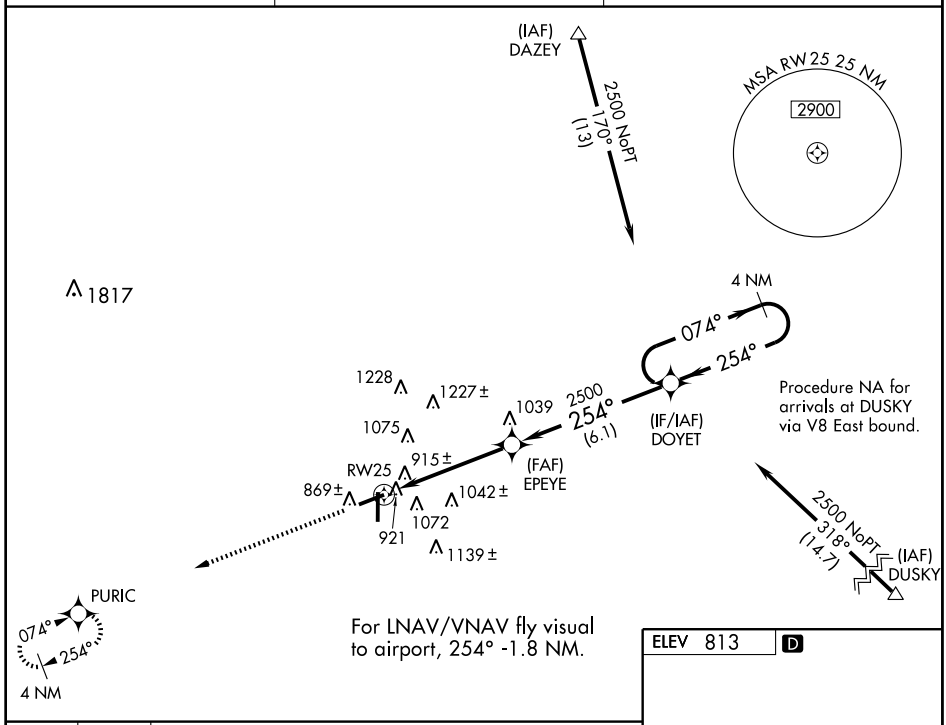
WAAS CH 56405 W25A	APP CRS 254°	Rwy ldg 4558 TDZE 812 Apt Elev 813

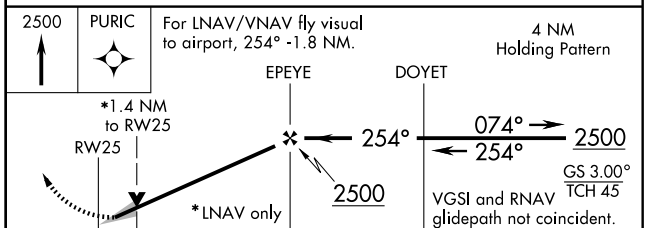
RNAV (GPS) RWY 25
FINDLAY (FDY)

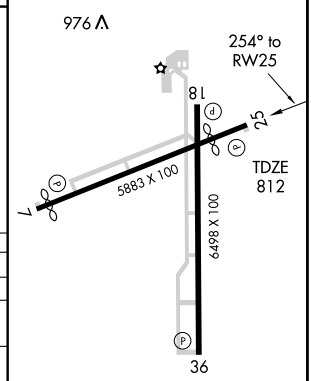
If local altimeter setting not received, use Lima Allen County altimeter setting and increase all DAs/MDAs 80 feet. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. VDP and Baro-VNAV NA when using Lima Allen County altimeter setting.

MISSED APPROACH: Climb to 2500 direct PURIC and hold.

ASOS	TOLEDO APP CON	UNICOM
124.425	120.8 317.55	122.725 (CTAF) L







HIRL Rwys 18-36 and 7-25 L
REIL Rwys 7, 18, 25 and 36 L

CATEGORY	A	B	C	D
LPV DA	1116-1 304 (400-1)			
LNAV/VNAV DA	1411-2 599 (600-2)			
LNAV MDA	1280-1 468 (500-1)		1280-1¼ 468 (500-1¼)	1280-1½ 468 (500-1½)
CIRCLING	1440-1 627 (700-1)		1440-1¾ 627 (700-1¾)	1440-2 627 (700-2)

EC-2, 14 JAN 2010 to 11 FEB 2010

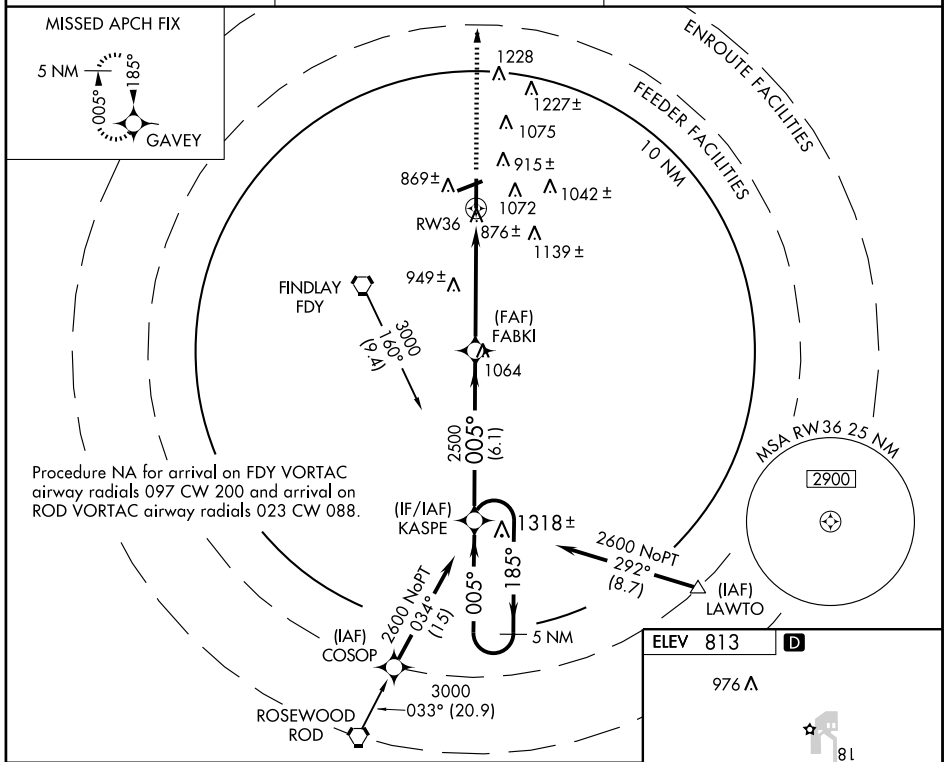
WAAS CH 72705 W36A	APP CRS 005°	Rwy ldg 6498 TDZE 808 Apt Elev 813

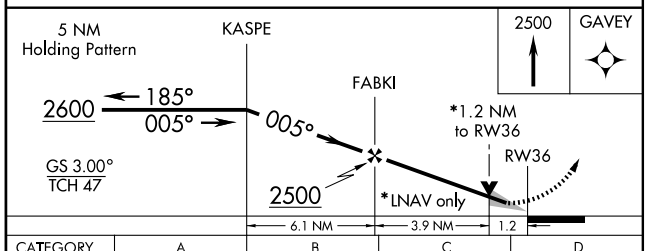
RNAV (GPS) RWY 36
FINDLAY (FDY)

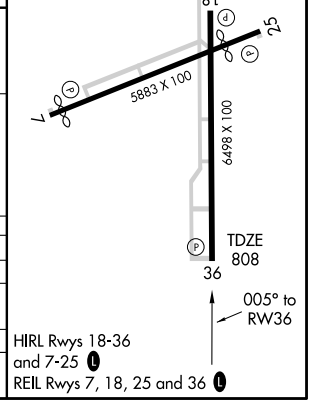
If local altimeter setting not received, use Lima Allen County altimeter setting and increase all DAs/MDAs 80 feet. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. VDP and Baro-VNAV NA when using Lima Allen County altimeter setting.

MISSED APPROACH: Climb to 2500 direct GAVEY and hold.

ASOS	TOLEDO APP CON	UNICOM
124.425	120.8 317.55	122.725 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1106-1 298 (300-1)			
LNAV/VNAV DA	1229-1½ 421 (500-1½)			
LNAV MDA	1220-1 412 (500-1)		1220-1¼ 412 (500-1¼)	
CIRCLING	1440-1 627 (700-1)		1440-1¾ 627 (700-1¾)	1440-2 627 (700-2)

EC-2, 14 JAN 2010 to 11 FEB 2010

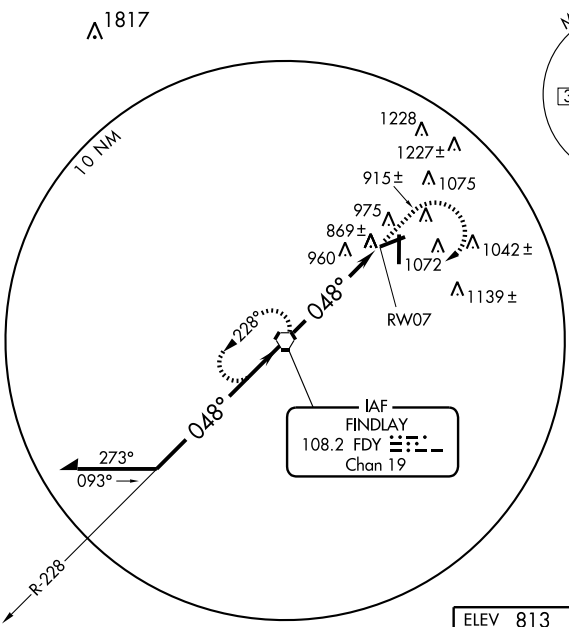
VORTAC FDY 108.2 Chan 19	APP CRS 048°	Rwy ldg 4558 TDZE 809 Apt Elev 813

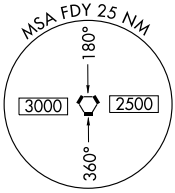
VOR RWY 7
FINDLAY (FDY)

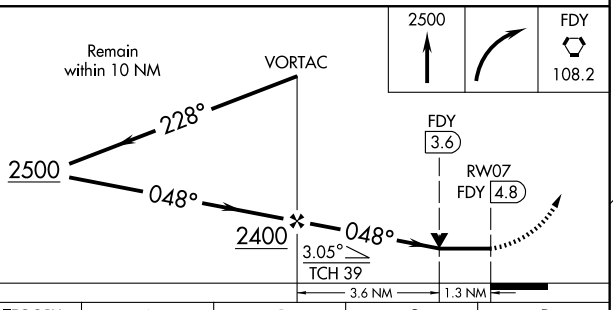
If local altimeter setting not received, use Lima Allen County altimeter setting and increase all MDAs 80 feet.
VDP NA with Lima Allen County altimeter setting.

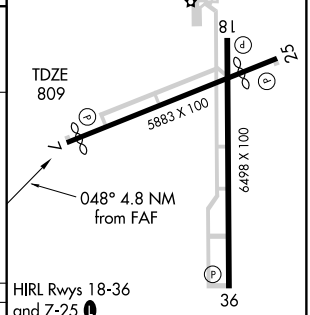
MISSED APPROACH: Climb to 2500 then right turn direct FDY VORTAC and hold.

ASOS	TOLEDO APP CON	UNICOM
124.425	120.8 317.55	122.725 (CTAF) L









HIRL Rwys 18-36 and 7-25 L
REIL Rwys 7, 18, 25 and 36 L

CATEGORY	A	B	C	D
S-7	1260-1 451 (500-1)		1260-1¼ 451 (500-1¼)	1260-1½ 451 (500-1½)
CIRCLING	1440-1 627 (700-1)		1440-1¾ 627 (700-1¾)	1440-2 627 (700-2)

FAF to MAP 4.8 NM					
Knots	60	90	120	150	180
Min:Sec	4:48	3:12	2:24	1:55	1:36

EC-2, 14 JAN 2010 to 11 FEB 2010

VOR MAH	APP CRS	Rwy ldg 4558
114.9	253°	TDZE 812
		Apt Elev 813

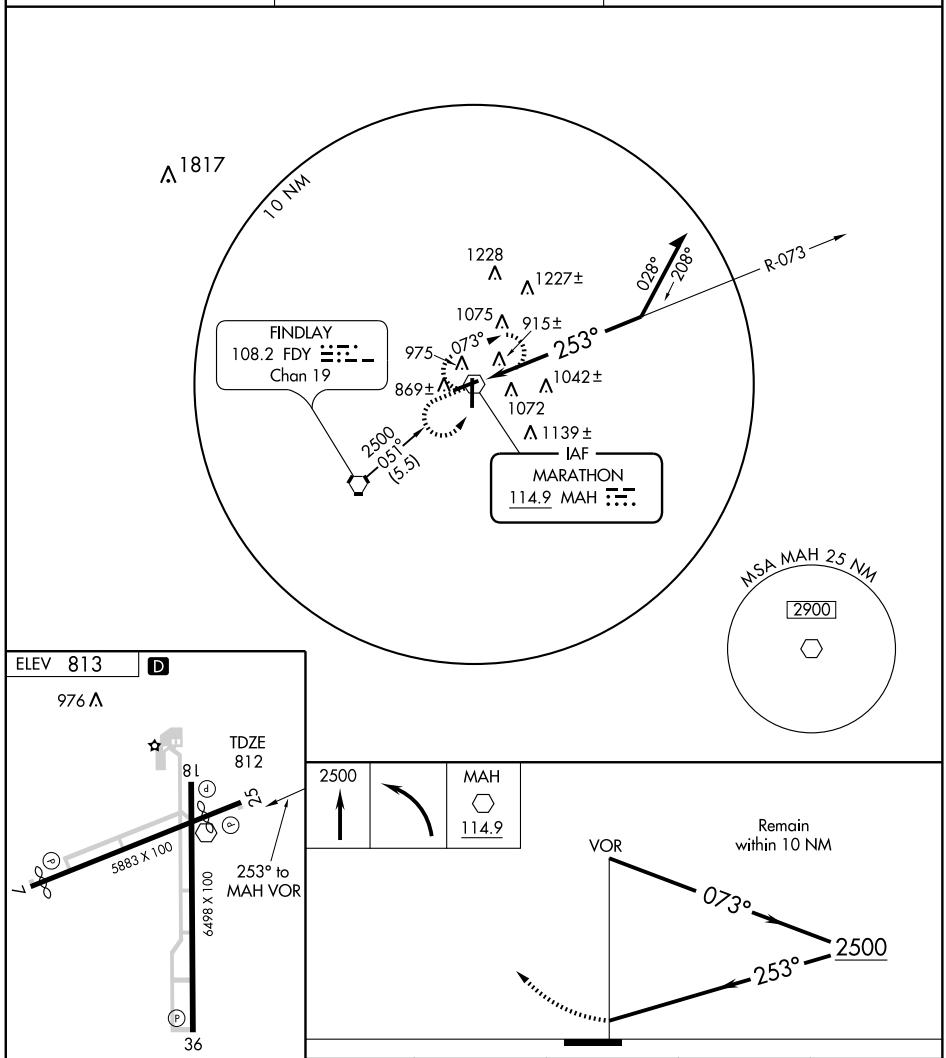
VOR RWY 25
FINDLAY (FDY)

If local altimeter setting not received, use Lima Allen County altimeter setting and increase all MDAs 80 feet.

NA

MISSED APPROACH: Climb to 2500 then left turn direct MAH VOR and hold.

ASOS	TOLEDO APP CON	UNICOM
124.425	120.8 317.55	122.725 (CTAF) L



CATEGORY	A	B	C	D
S-25	1500-1 688 (700-1)		1500-2 688 (700-2)	1500-2¼ 688 (700-2¼)
CIRCLING	1500-1 687 (700-1)		1500-2 687 (700-2)	1500-2¼ 687 (700-2¼)

HIRL Rwys 18-36 and 7-25 L
REIL Rwys 7, 18, 25 and 36 L

EC-2, 14 JAN 2010 to 11 FEB 2010

VOR MAH	APP CRS	Rwy ldg 6500
114.9	007°	TDZE 808
		Apt Elev 813

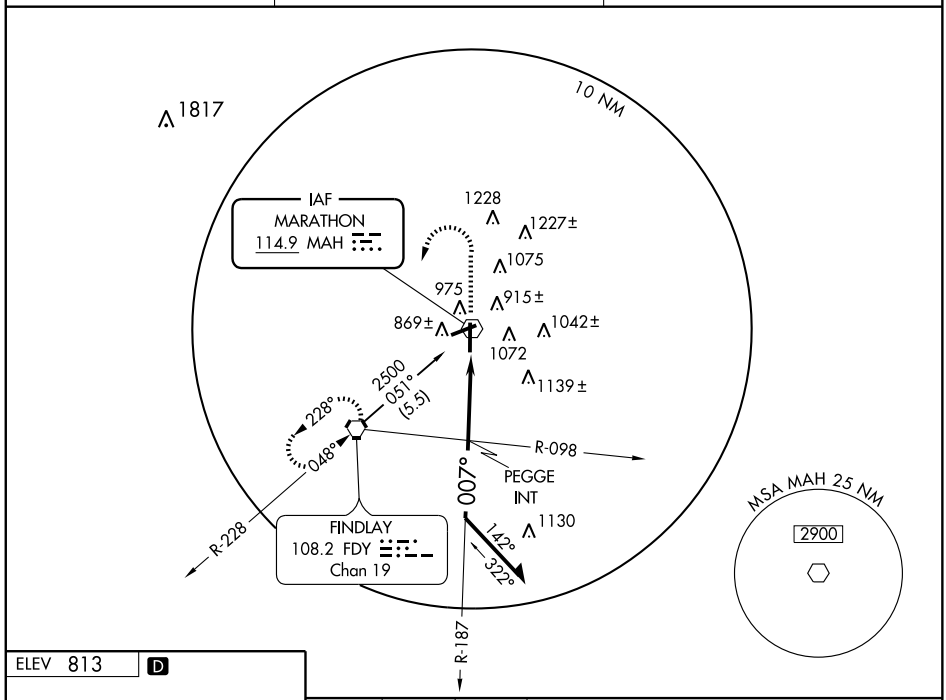
VOR RWY 36
FINDLAY (FDY)

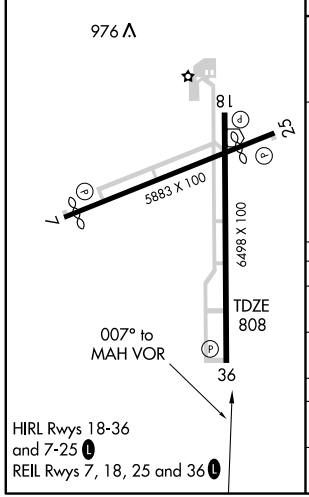
When local altimeter setting not received, use Lima Allen County altimeter setting and increase all MDA 80 feet and increase all Cat C/D visibilities ¼ mile.

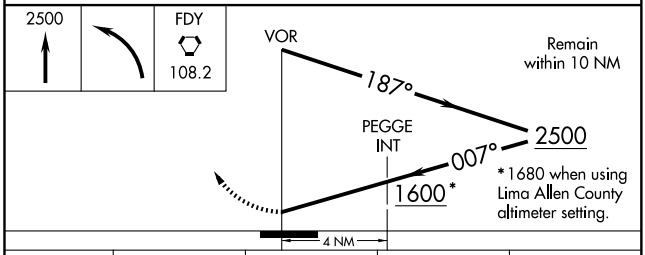
NA

MISSED APPROACH: Climb to 2500 then left turn direct FDY VORTAC and hold.

ASOS	TOLEDO APP CON	UNICOM
124.425	120.8 317.55	122.725 (CTAF) L







CATEGORY	A	B	C	D
S-36	1600-1 792 (800-1)	1600-1¼ 792 (800-1¼)	1600-2¼ 792 (800-2¼)	1600-2½ 792 (800-2½)
CIRCLING	1600-1 787 (800-1)	1600-1¼ 787 (800-1¼)	1600-2¼ 787 (800-2¼)	1600-2½ 787 (800-2½)
PEGGE FIX MINIMUMS				
S-36	1200-1 392 (400-1)			1200-1¼ 392 (400-1¼)
CIRCLING	1440-1 627 (700-1)		1440-1¾ 627 (700-1¾)	1440-2 627 (700-2)

EC-2, 14 JAN 2010 to 11 FEB 2010

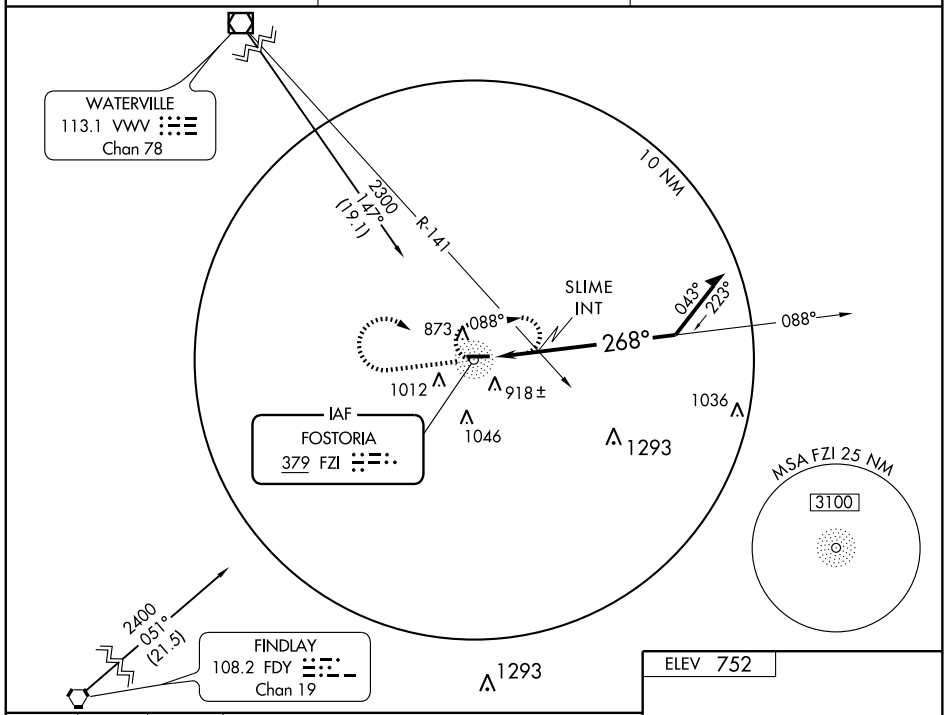
NDB FZI	APP CRS	Rwy ldg	5005
379	268°	TDZE	752
		Apt Elev	752

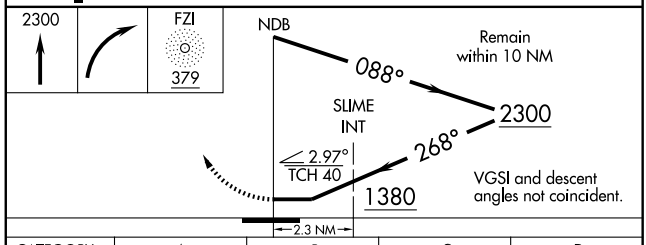
NDB RWY 27
FOSTORIA METROPOLITAN (FZI)

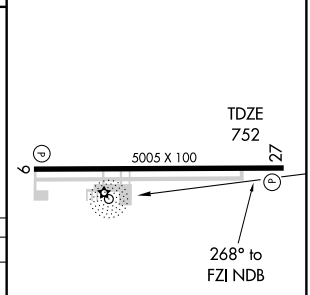
Visibility reduction by helicopters NA.
When local altimeter setting not received, use Findlay altimeter setting and increase all MDA 60 feet, and increase all Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 2300 then right turn direct FZI NDB and hold.

AWOS-3	TOLEDO APP CON	UNICOM
124.625	126.1 307.0	122.7 (CTAF) L







CATEGORY	A	B	C	D
S-27	1380-1 628 (700-1)		1380-1¾ 628 (700-1¾)	NA
CIRCLING	1380-1 628 (700-1)		1380-1¾ 628 (700-1¾)	NA
SLIME INT MINIMUMS				
S-27	1240-1 488 (500-1)		1240-1¼ 488 (500-1¼)	NA
CIRCLING	1300-1 548 (600-1)	1320-1 568 (600-1)	1320-1½ 568 (600-1½)	NA

REIL Rwys 9 and 27 L
MIRL Rwy 9-27 L

WAAS CH 56610 W27A	APP CRS 275°	Rwy ldg 5005 TDZE 752 Apt Elev 752

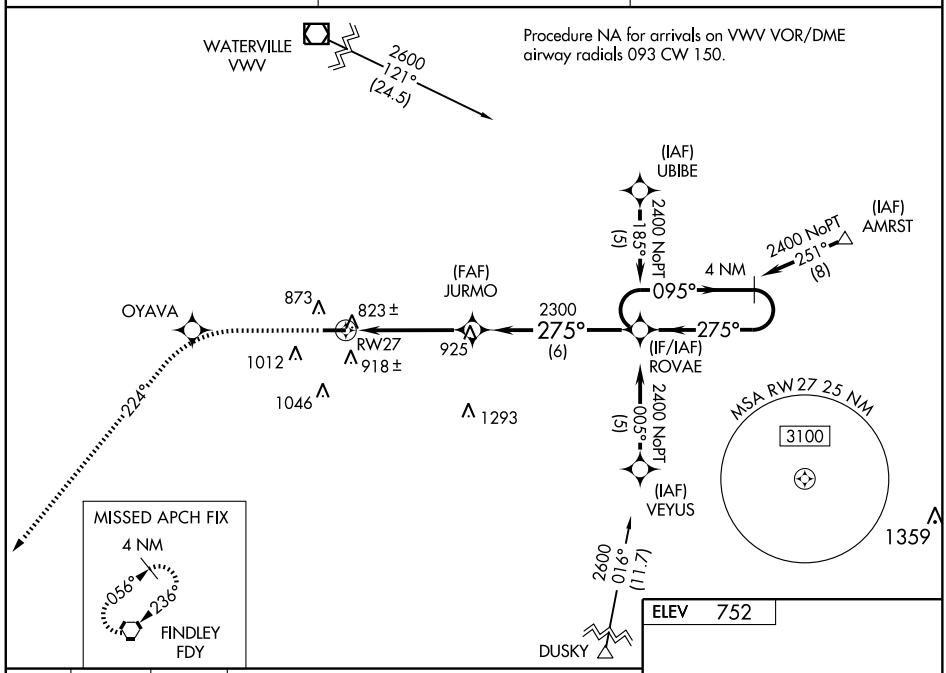
RNAV (GPS) RWY 27
FOSTORIA METROPOLITAN (FZI)

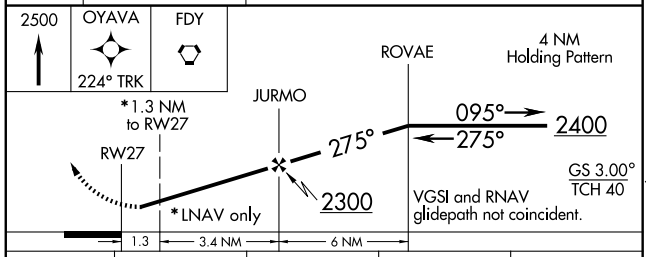
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Findlay altimeter setting and increase all DA 47 feet and all MDA 60 feet, increase LPV all Cats and LNAV/VNAV all Cats and Circling Cat C visibility ¼ mile. Baro-VNAV and VDP NA when using Findlay altimeter setting.

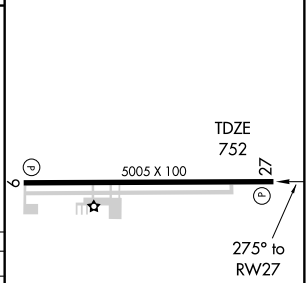
NA

MISSED APPROACH: Climb to 2500 direct OYAVA and via 224° track to FDY VORTAC and hold.

AWOS-3	TOLEDO APP CON	UNICOM
124.625	126.1 307.0	122.7 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1036-1 284 (300-1)			NA
LNAV/VNAV DA	1161-1½ 409 (500-1½)			NA
LNAV MDA	1180-1 428 (500-1)		1180-1¼ 428 (500-1¼)	NA
CIRCLING	1300-1 548 (600-1)	1320-1 568 (600-1)	1320-1½ 568 (600-1½)	NA

REIL Rwys 9 and 27 L
MIRL Rwy 9-27 L

EC-2, 14 JAN 2010 to 11 FEB 2010

VORTAC FDY	APP CRS	Rwy ldg	N/A
108.2	051°	TDZE	N/A
Chan 19		Apt Elev	752

VOR-A

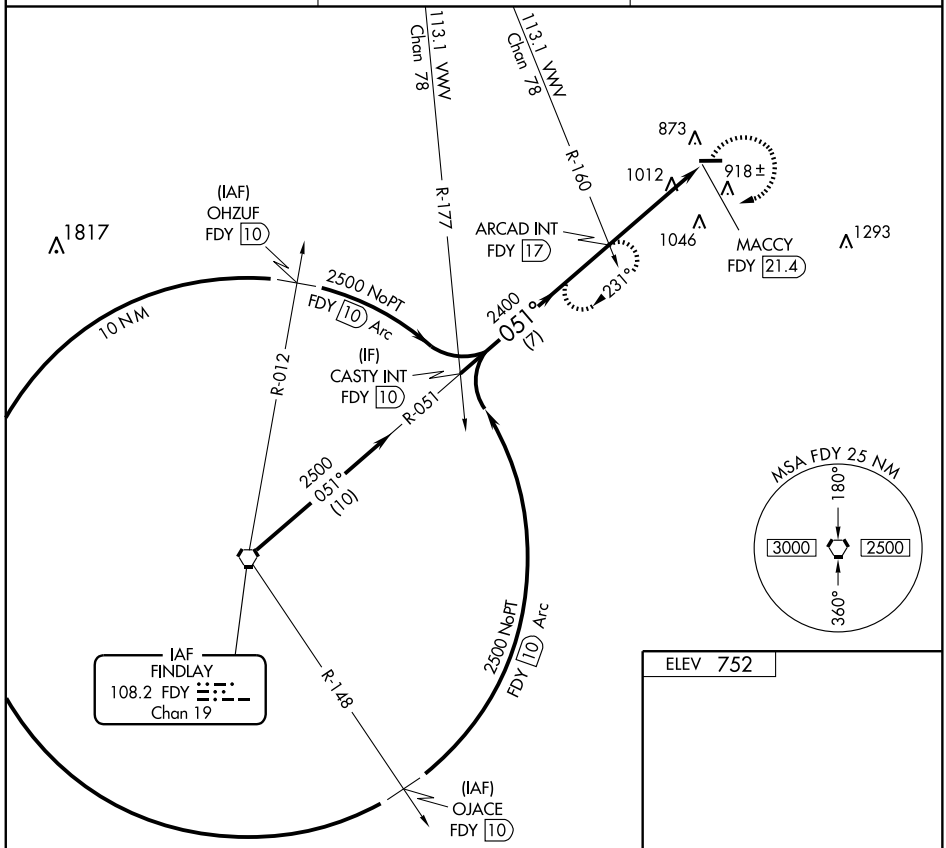
FOSTORIA METROPOLITAN (FZI)

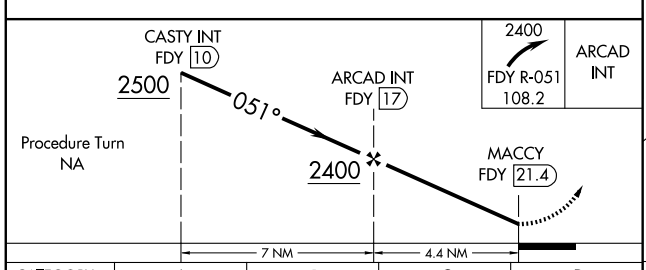
When local altimeter setting not received, use Findlay altimeter setting and increase all MDA 60 feet, and increase all Cat C visibility ¼ mile.

NA

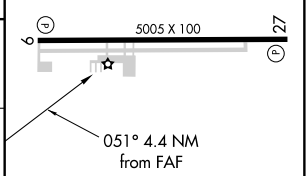
MISSED APPROACH: Climbing right turn to 2400 via FDY VORTAC R-051 to ARCAD Int/FDY 17 DME and hold.

AWOS-3	TOLEDO APP CON	UNICOM
124.625	126.1 307.0	122.7 (CTAF) L





ELEV 752



REIL Rwys 9 and 27 L
MIRL Rwy 9-27 L

CATEGORY	A	B	C	D
CIRCLING	1400-1 648 (700-1)	1400-1¼ 648 (700-1¼)	1400-1¾ 648 (700-1¾)	NA

FAF to MAP 4.4 NM					
Knots	60	90	120	150	180
Min:Sec	4:24	2:56	2:12	1:46	1:28

EC-2, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	4011
095°	TDZE	663
	Apt Elev	663

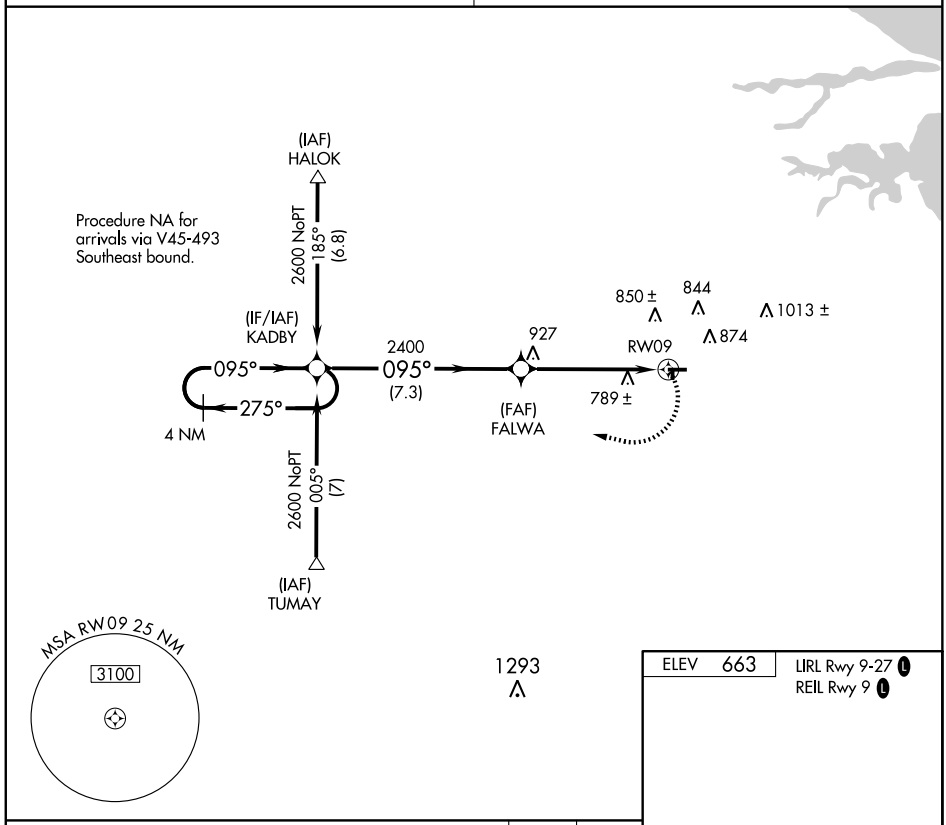
RNAV (GPS) RWY 9
FREMONT (14G)

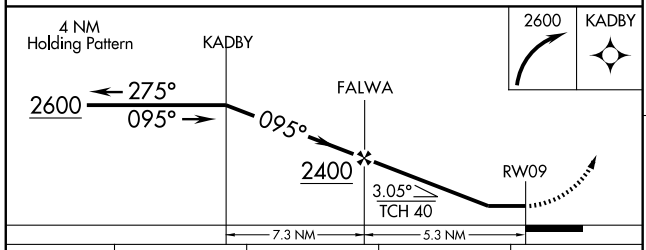
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Use Sandusky County Rgnl altimeter setting; when not received use Metcalf Field altimeter setting and increase all MDA 40 feet and LNAV Cat D visibility ¼ mile.

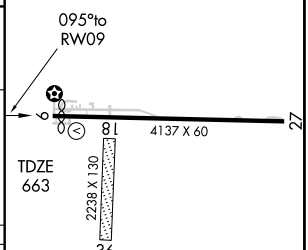
NA

MISSED APPROACH: Climbing right turn to 2600 direct KADBY and hold.

TOLEDO APP CON	UNICOM
126.1 307.0	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	1080-1 417 (500-1)		1080-1¼ 417 (500-1¼)	
CIRCLING	1200-1 537 (600-1)		1200-1½ 537 (600-1½)	1220-2 557 (600-2)

EC-2, 14 JAN 2010 to 11 FEB 2010

VOR/DME VWV 113.1 Chan 78	APP CRS 110°	Rwy ldg 4011 TDZE 663 Apt Elev 663

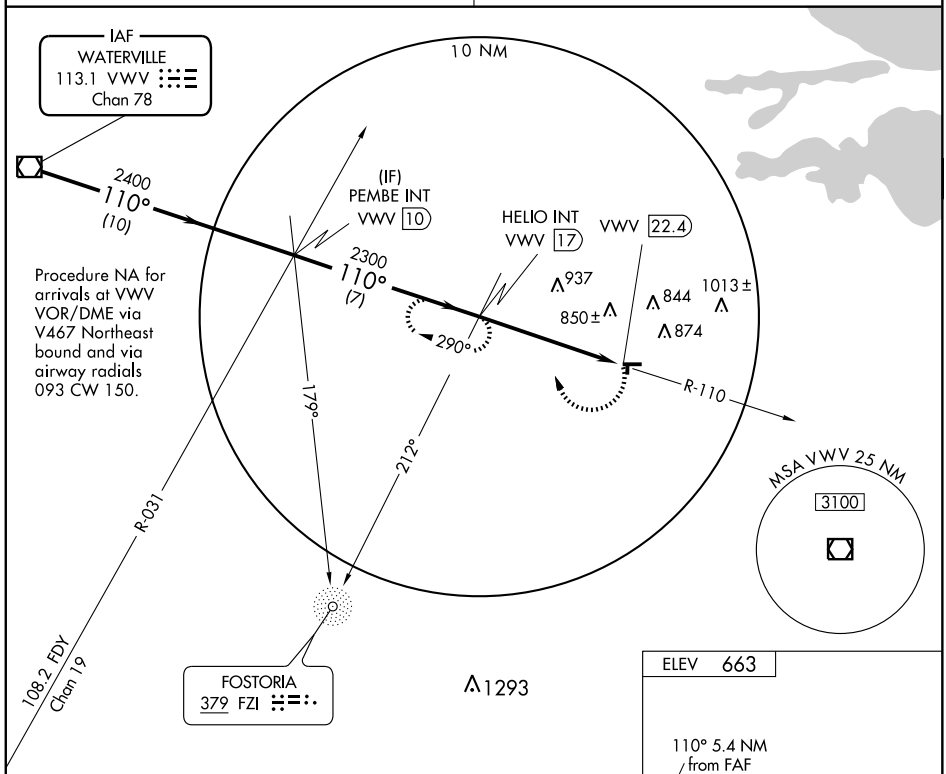
VOR RWY 9
FREMONT (14G)

ADF or DME required. Use Sandusky County Rgnl altimeter setting; when not received, use Metcalf Field altimeter setting and increase all MDA 40 feet, increase S-9 Cats C and D and Circling Cat C visibility ¼ mile.

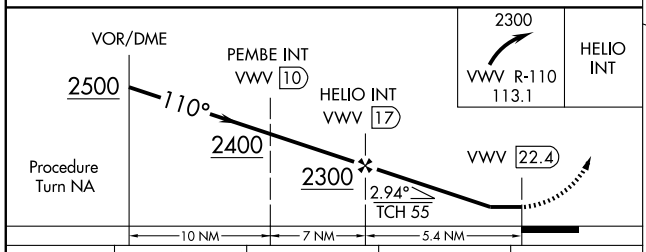
NA

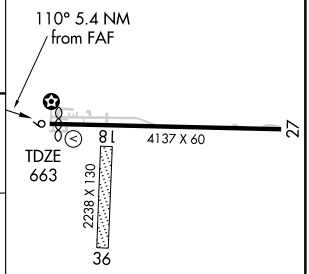
MISSED APPROACH: Climbing right turn to 2300 via VWV VOR/DME R-110 to HELIO Int/VWV 17 DME and hold.

TOLEDO APP CON	UNICOM
126.1 307.0	122.8 (CTAF) L



ADF or DME REQUIRED





LIRL Rwy 9-27 L
REIL Rwy 9 L

CATEGORY	A	B	C	D
S-9	1260-1 597 (600-1)	1260-1¼ 597 (600-1¼)	1260-1½ 597 (600-1½)	1260-1¾ 597 (600-1¾)
CIRCLING	1260-1 597 (600-1)	1260-1¼ 597 (600-1¼)	1260-1½ 597 (600-1½)	1260-2 597 (600-2)

FAF to MAP 5.4 NM

Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48

EC-2, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	5500
067°	TDZE	665
	Apt Elev	665

GPS RWY 6

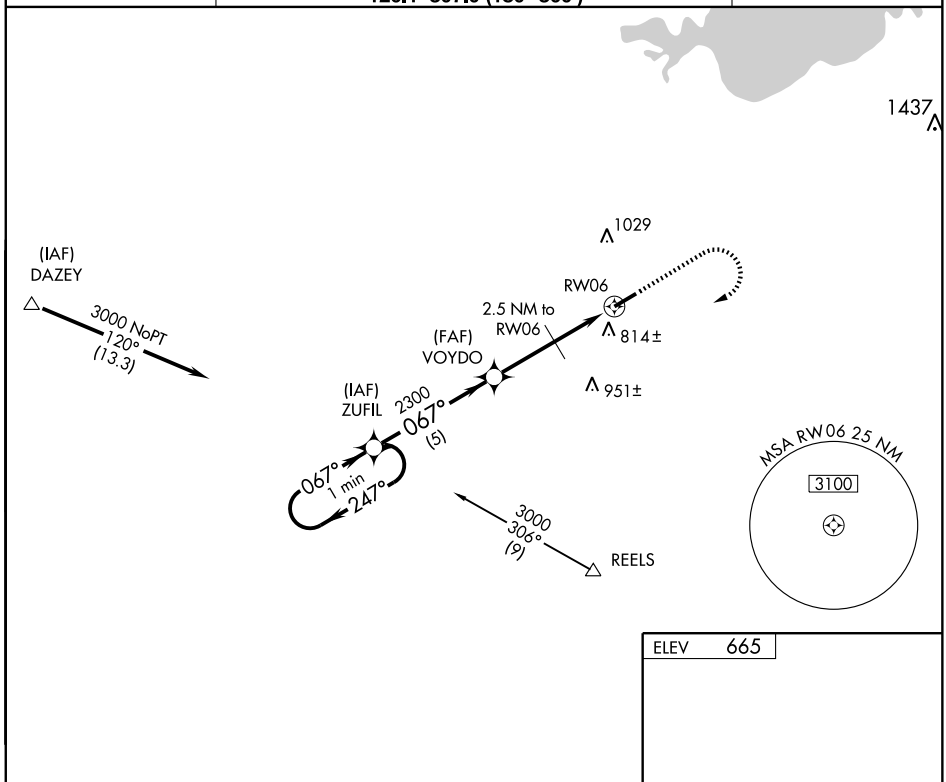
FREMONT/ SANDUSKY COUNTY RGNL (S24)

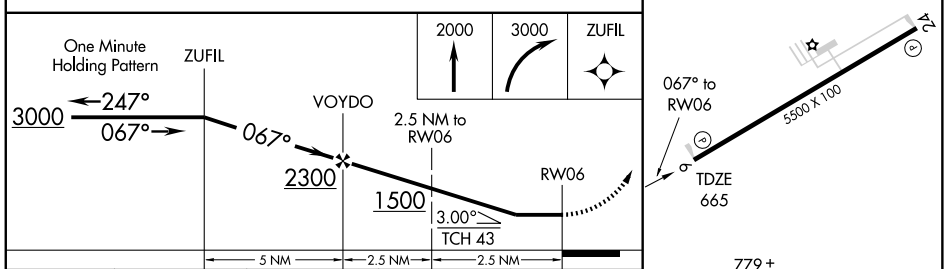
NA

When local altimeter setting not received, use Toledo Express altimeter setting and increase all MDAs 100 feet.

MISSED APPROACH: Climb to 2000, then climbing right turn to 3000 direct ZUFIL WP and hold.

AWOS-3	MANSFIELD APP CON	UNICOM
119.575	127.35 390.8 (360° - 180°) TOLEDO APP CON 126.1 307.0 (180°-360°)	123.05 (CTAF) L





CATEGORY	A	B	C	D
S-6	1160-1 495 (500-1)		1160-1 ¼ 495 (500-1 ¼)	1160-1 ½ 495 (500-1 ½)
CIRCLING	1280-1 615 (700-1)		1280-1 ¾ 615 (700-1 ¾)	1480-2 ¾ 815 (900-2 ¾)

REIL Rwys 6 and 24
MIRL Rwy 6-24 L

APP CRS	Rwy ldg	5500
247°	TDZE	662
	Apt Elev	665

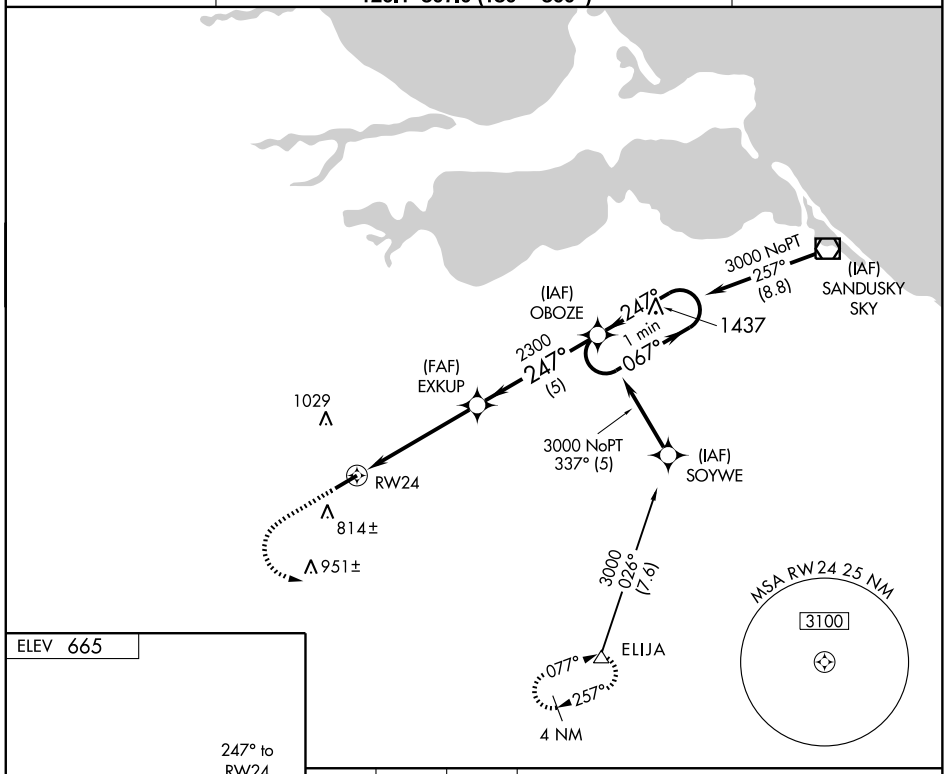
GPS RWY 24
FREMONT/ SANDUSKY COUNTY RGNL (S24)

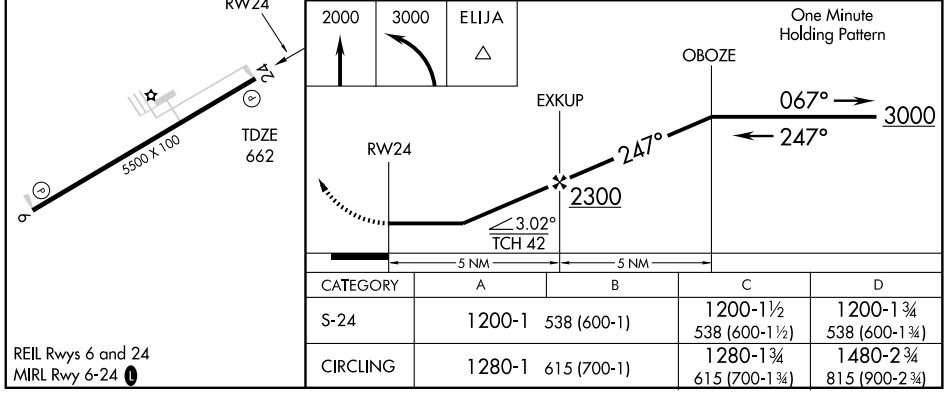
NA

When local altimeter setting not received, use Toledo Express altimeter setting and increase all MDAs 100 feet.

MISSED APPROACH: Climb to 2000, then climbing left turn to 3000 direct ELIJA and hold.

AWOS-3	MANSFIELD APP CON★	UNICOM
119.575	127.35 390.8 (360°- 180°) TOLEDO APP CON 126.1 307.0 (180°- 360°)	123.05 (CTAF) L





CATEGORY	A	B	C	D
S-24	1200-1 538 (600-1)		1200-1½ 538 (600-1½)	1200-1¾ 538 (600-1¾)
CIRCLING	1280-1 615 (700-1)		1280-1¾ 615 (700-1¾)	1480-2¾ 815 (900-2¾)

REIL Rwys 6 and 24
MIRL Rwy 6-24 L

VOR/DME SKY 109.2 Chan 29	APP CRS 249°	Rwy ldg 5500 TDZE 662 Apt Elev 665

VOR/DME RWY 24

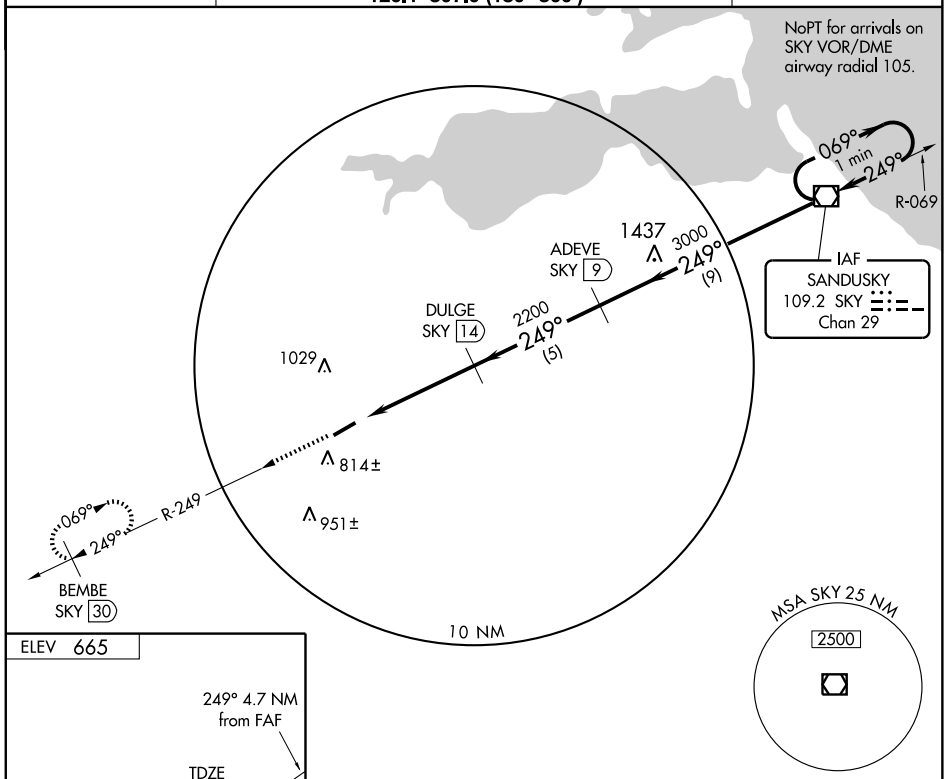
FREMONT/ SANDUSKY COUNTY RGNL (S24)

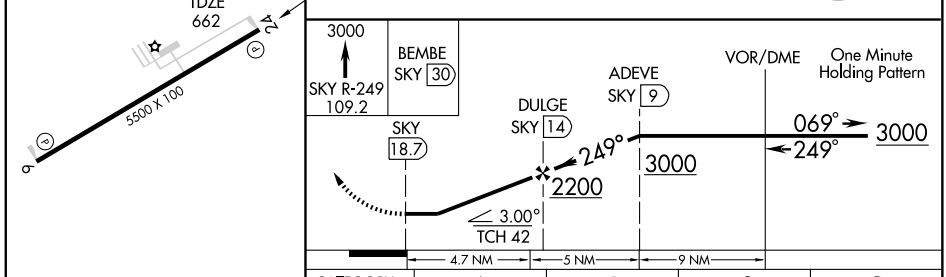
NA

If local altimeter not received use Toledo Express altimeter setting and increase all MDAs 100 feet.

MISSED APPROACH: Climb to 3000 via SKY R-249 to BEMBE/30 DME and hold.

AWOS-3	MANSFIELD APP CON★	UNICOM
119.575	127.35 390.8 (360° - 180°) TOLEDO APP CON 126.1 307.0 (180°-360°)	123.05 (CTAF) L





CATEGORY	A	B	C	D
S-24	1260-1 598 (600-1)		1260-1½ 598 (600-1½)	1260-1¾ 598 (600-1¾)
CIRCLING	1260-1 595 (600-1)		1260-1½ 595 (600-1½)	1480-2¾ 815 (900-2¾)

REIL Rwys 6 and 24
MIRL Rwy 6-24 L

EC-2, 14 JAN 2010 to 11 FEB 2010

GALION, OHIO

AL-5044 (FAA)

VORTAC MFD	APP CRS	Rwy ldg	3317
108.8	050°	TDZE	1225
Chan 25		Apt Elev	1225

VOR/DME RNAV or GPS RWY 5

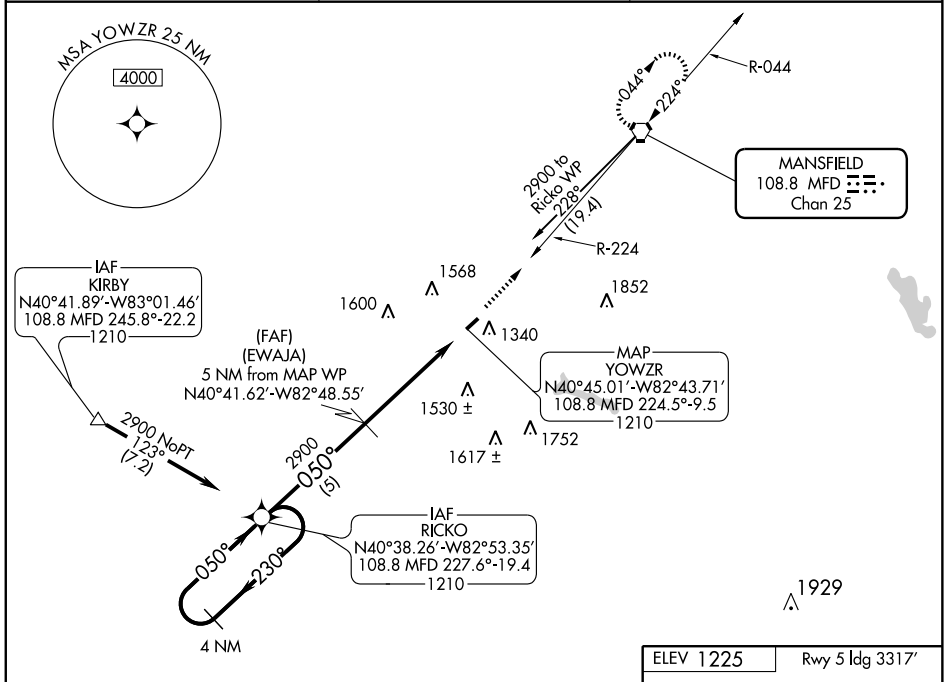
GALION MUNI (GQQ)

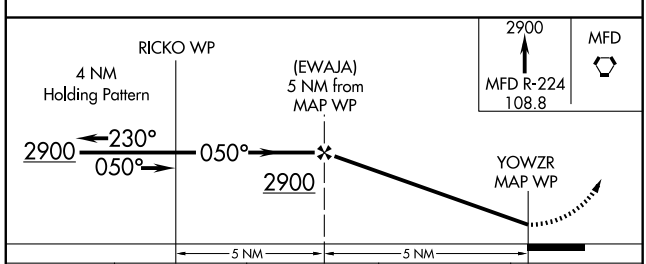
NA

Use Mansfield altimeter setting; when not received, use Port Columbus Intl altimeter setting.

MISSED APPROACH: Climb to 2900 via MFD R-224 to MFD VORTAC and hold.

MANSFIELD APP CON ★	CLNC DEL	UNICOM
124.2 390.8	126.8	122.8 (CTAF) L

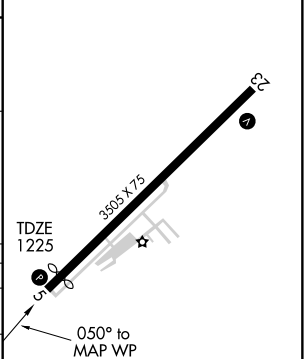




CATEGORY	A	B	C	D
S-5	1760-1 535 (600-1)		1760-1½ 535 (600-1½)	NA
CIRCLING	1800-1 575 (600-1)		1800-1½ 575 (600-1½)	NA
PORT COLUMBUS INTL ALTIMETER SETTING MINIMUMS				
S-5	1900-1 675 (700-1)		1900-2 675 (700-2)	NA
CIRCLING	1940-1 715 (800-1)		1940-2 715 (800-2)	NA

ELEV 1225

Rwy 5 ldg 3317′



MIRL Rwy 5-23 L

REIL Rwys 5 and 23 L

EC-2, 14 JAN 2010 to 11 FEB 2010

VORTAC MFD	APP CRS	Rwy ldg	3505
108.8	224°	TDZE	1225
Chan 25		Apt Elev	1225

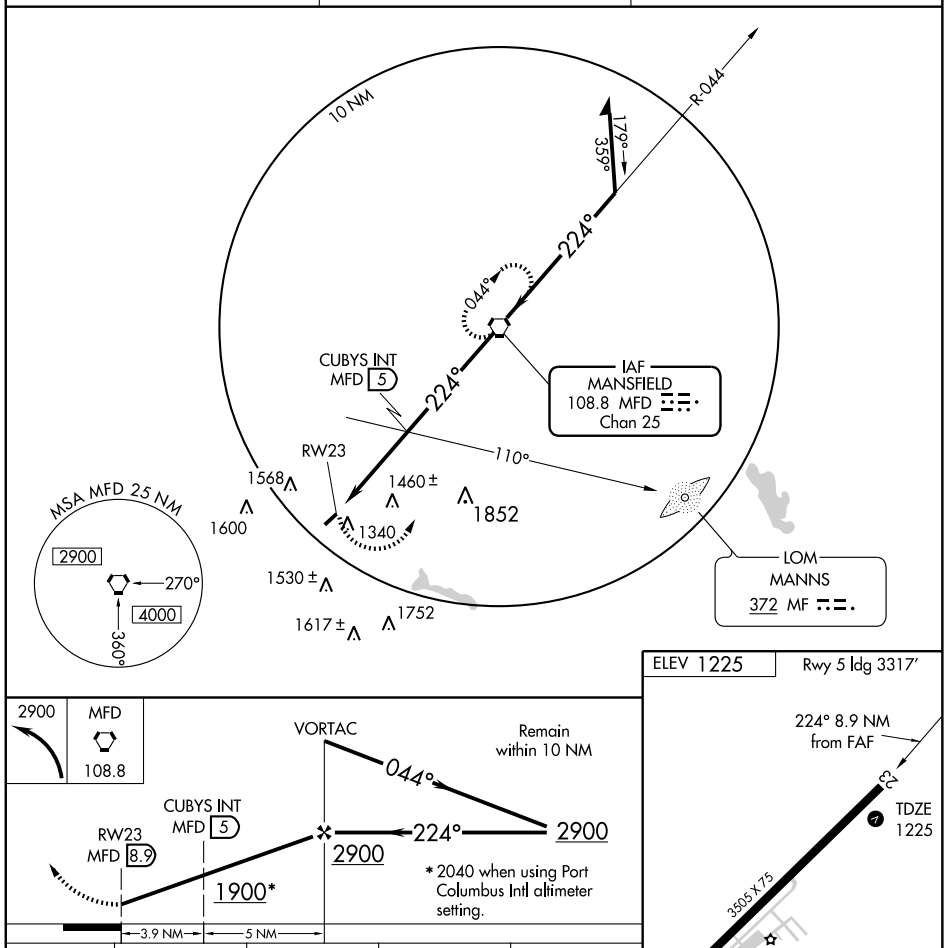
VOR or GPS RWY 23

GALION MUNI (GQQ)

NA — Use Mansfield altimeter setting; when not received, use Port Columbus Intl altimeter setting and increase all MDAs 140 feet and all visibilities ½ mile.

MISSED APPROACH: Climbing left turn to 2900 direct MFD VORTAC and hold.

MANSFIELD APP CON ★	CLNC DEL	UNICOM
124.2 390.8	126.8	122.8 (CTAF) L



CATEGORY	A	B	C	D
S-23	1900-1 675 (700-1)		1900-2 675 (700-2)	NA
CIRCLING	1900-1 675 (700-1)		1900-2 675 (700-2)	NA
CUBYS FIX MINIMUMS				
S-23	1760-1 535 (600-1)		1760-1½ 535 (600-1½)	NA
CIRCLING	1800-1 575 (600-1)		1800-1½ 575 (600-1½)	NA

FAF to MAP 8.9 NM

Knots	60	90	120	150	180
Min:Sec	8:54	5:56	4:27	3:34	2:58

EC-2, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	3998
235°	TDZE	567
	Apt Elev	567

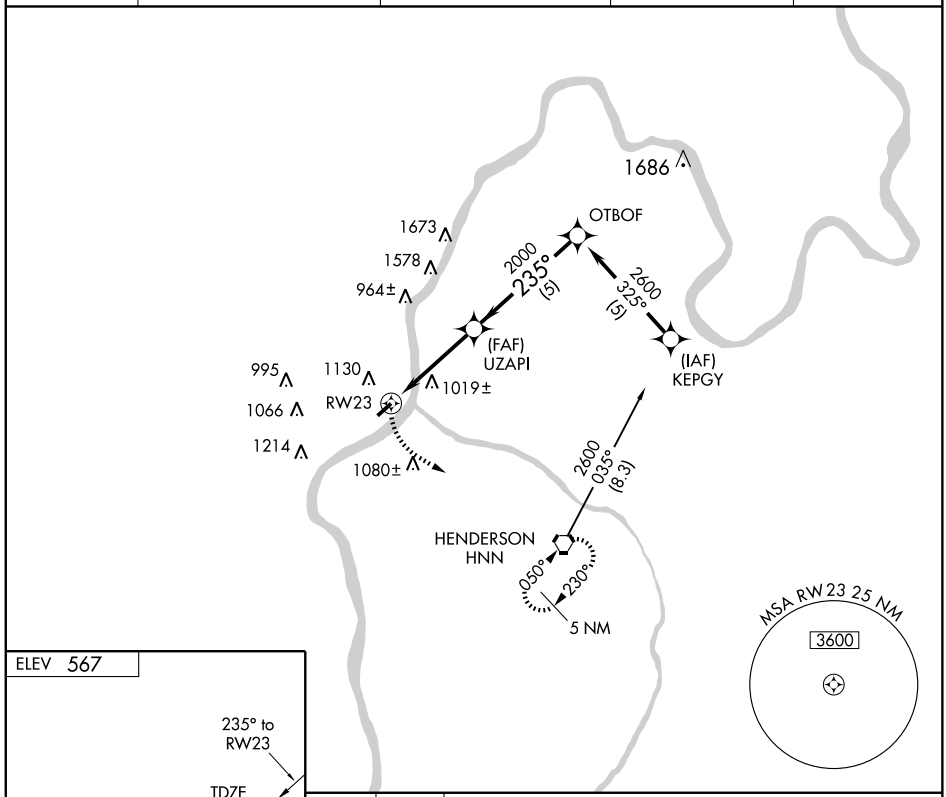
GPS RWY 23

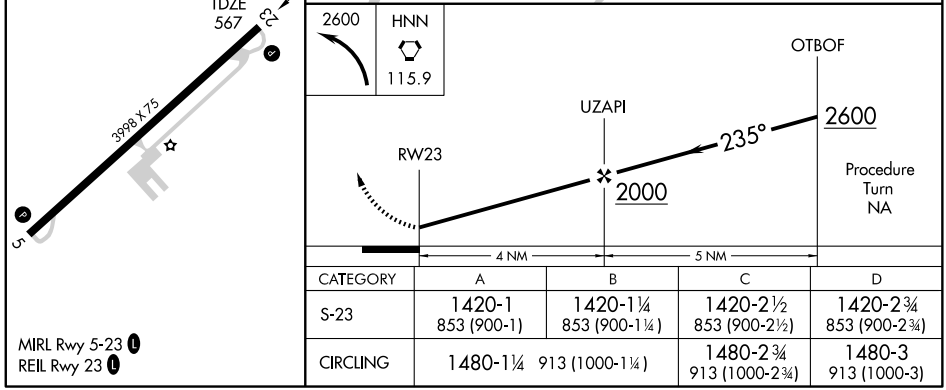
GALLIPOLIS / GALLIA-MEIGS RGNL (GAS)

NA

MISSED APPROACH: Climbing left turn to 2600 direct HNN VORTAC and hold.

AWOS-3	POINT PLEASANT AWOS-3	HUNTINGTON APP CON	CLNC DEL	UNICOM
119.925	119.675	128.4 270.1	124.55	123.0 (CTAF) L





CATEGORY	A	B	C	D
S-23	1420-1 853 (900-1)	1420-1¼ 853 (900-1¼)	1420-2½ 853 (900-2½)	1420-2¾ 853 (900-2¾)
CIRCLING	1480-1¼ 913 (1000-1¼)		1480-2¾ 913 (1000-2¾)	1480-3 913 (1000-3)

MIRL Rwy 5-23 L
REIL Rwy 23 L

EC-2, 14 JAN 2010 to 11 FEB 2010

VORTAC HNN 115.9 Chan 106	APP CRS 310°	Rwy ldg N/A TDZE N/A Apt Elev 567

VOR or GPS-B

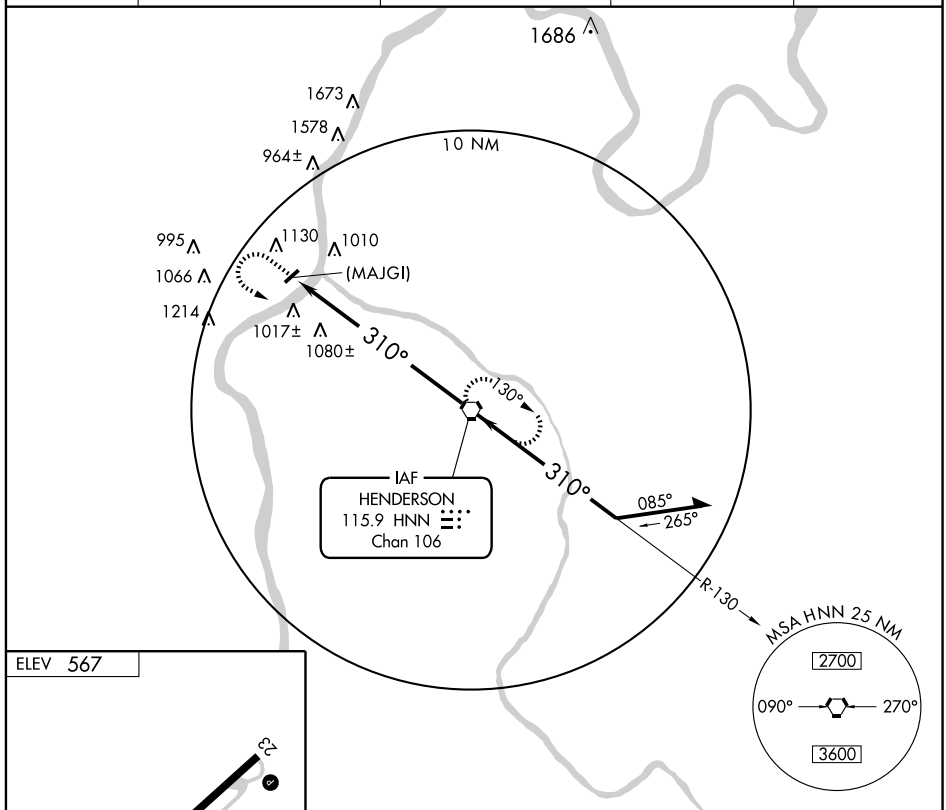
GALLIPOLIS / GALLIA-MEIGS RGNL (GAS)

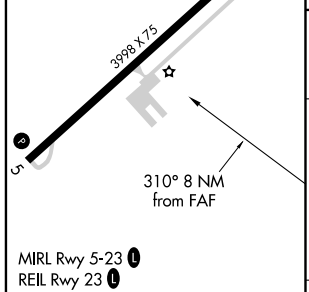
Use Point Pleasant, WV altimeter setting; if not received, use Huntington, WV altimeter setting and increase all MDAs 80 feet.

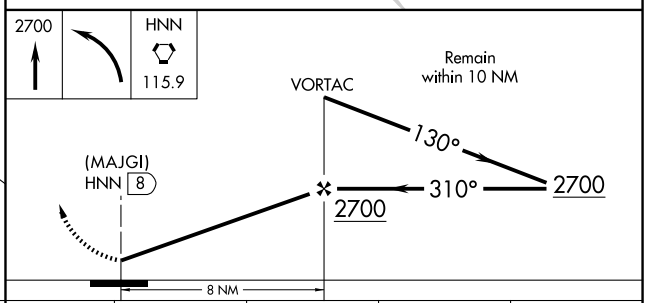
NA

MISSED APPROACH: Climb to 2700 then left turn direct HNN VORTAC and hold.

AWOS-3	POINT PLEASANT AWOS-3	HUNTINGTON APP CON	CLNC DEL	UNICOM
119.925	119.675	128.4 270.1	124.55	123.0 (CTAF) L







FAF to MAP 8 NM					
Knots	60	90	120	150	180
Min:Sec	8:00	5:20	4:00	3:12	2:40

CATEGORY	A	B	C	D
CIRCLING	1480-1¼ 913 (1000-1¼)		1480-2¾ 913 (1000-2¾)	1480-3 913 (1000-3)

EC-2, 14 JAN 2010 to 11 FEB 2010

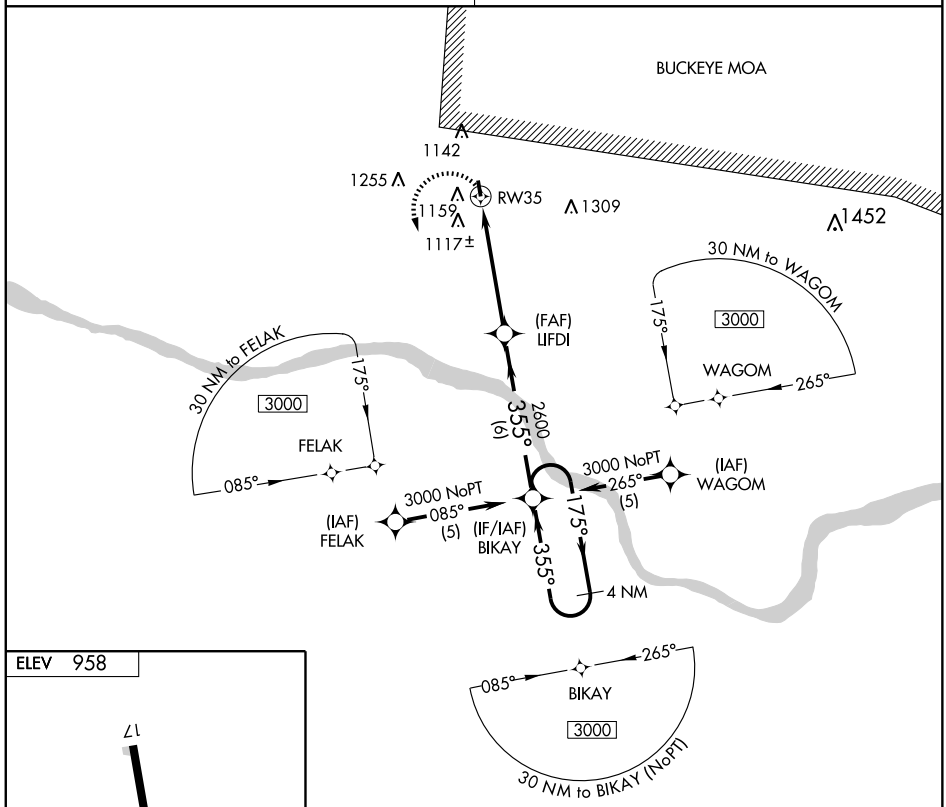
APP CRS	Rwy ldg	3530
355°	TDZE	958
	Apt Elev	958

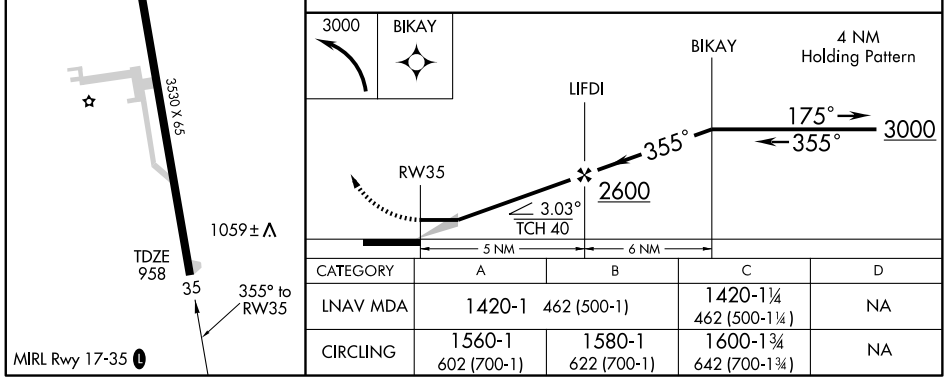
RNAV (GPS) RWY 35
GEORGETOWN /BROWN COUNTY (GEO)

DME/DME RNP-0.3 NA.
Use Cincinnati/Northern Kentucky Intl, KY altimeter setting.

MISSED APPROACH: Climbing left turn to 3000 direct BIKAY WP and hold.

INDIANAPOLIS CENTER	CTAF
135.575 290.5	122.9





CATEGORY	A	B	C	D
LNAV MDA	1420-1 462 (500-1)		1420-1¼ 462 (500-1¼)	NA
CIRCLING	1560-1 602 (700-1)	1580-1 622 (700-1)	1600-1¾ 642 (700-1¾)	NA

VOR/DME FLM	APP CRS	Rwy ldg	N/A
117.0	059°	TDZE	N/A
Chan 117		Apt Elev	957

VOR/DME or GPS-A

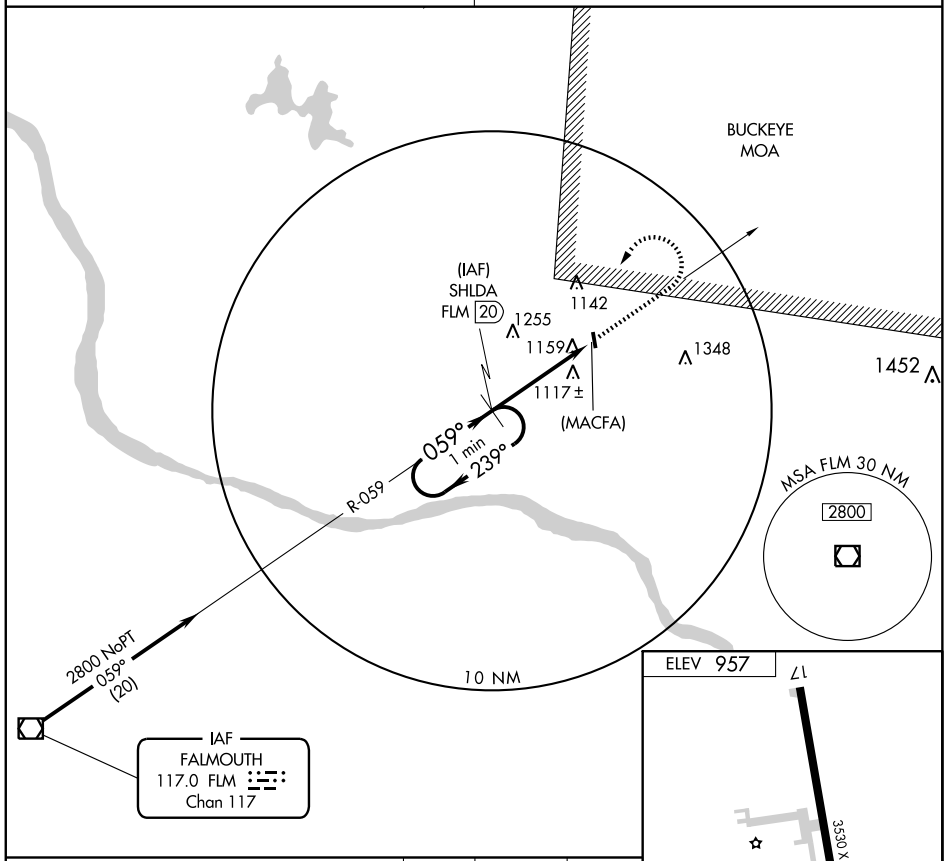
GEORGETOWN/ BROWN COUNTY (GEO)

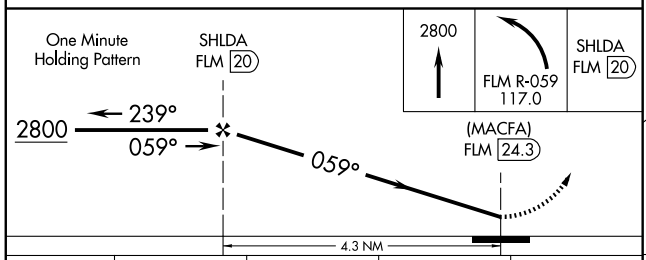
T
A NA

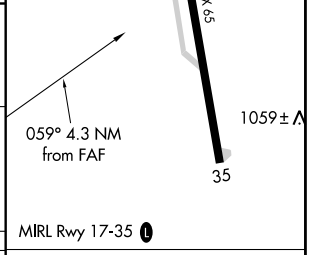
Use Cincinnati/Northern Kentucky Intl, KY altimeter setting.

MISSED APPROACH: Climb to 2800; then left turn via FLM R-059 to SHLDA 20 DME and hold.

INDIANAPOLIS CENTER	CTAF L
135.575 290.5	122.9







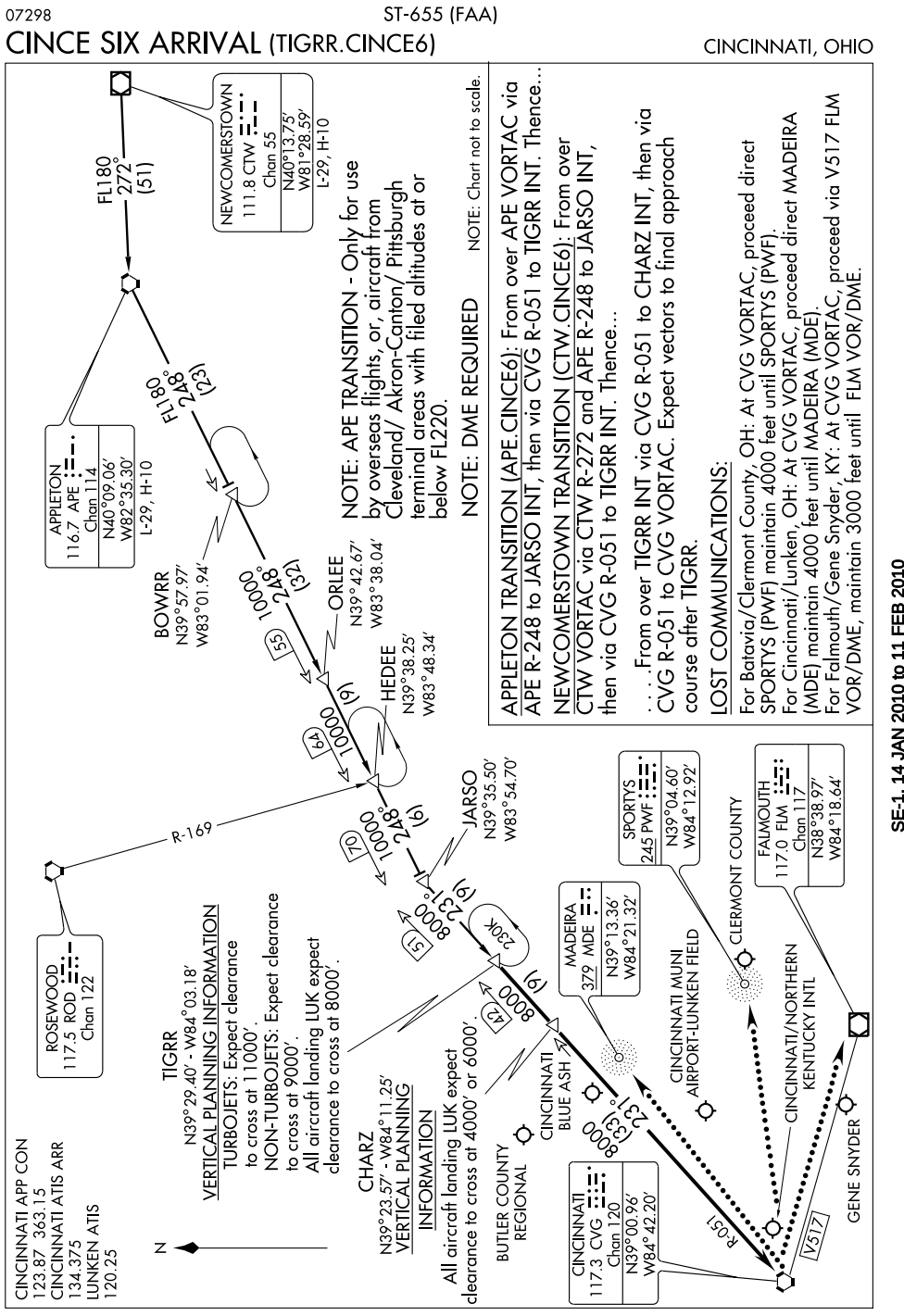
CATEGORY	A	B	C	D
CIRCLING	1700-1 743 (800-1)	1700-1¼ 743 (800-1¼)	1700-2¼ 743 (800-2¼)	NA

Knots	60	90	120	150	180
Min:Sec					

EC-2, 14 JAN 2010 to 11 FEB 2010

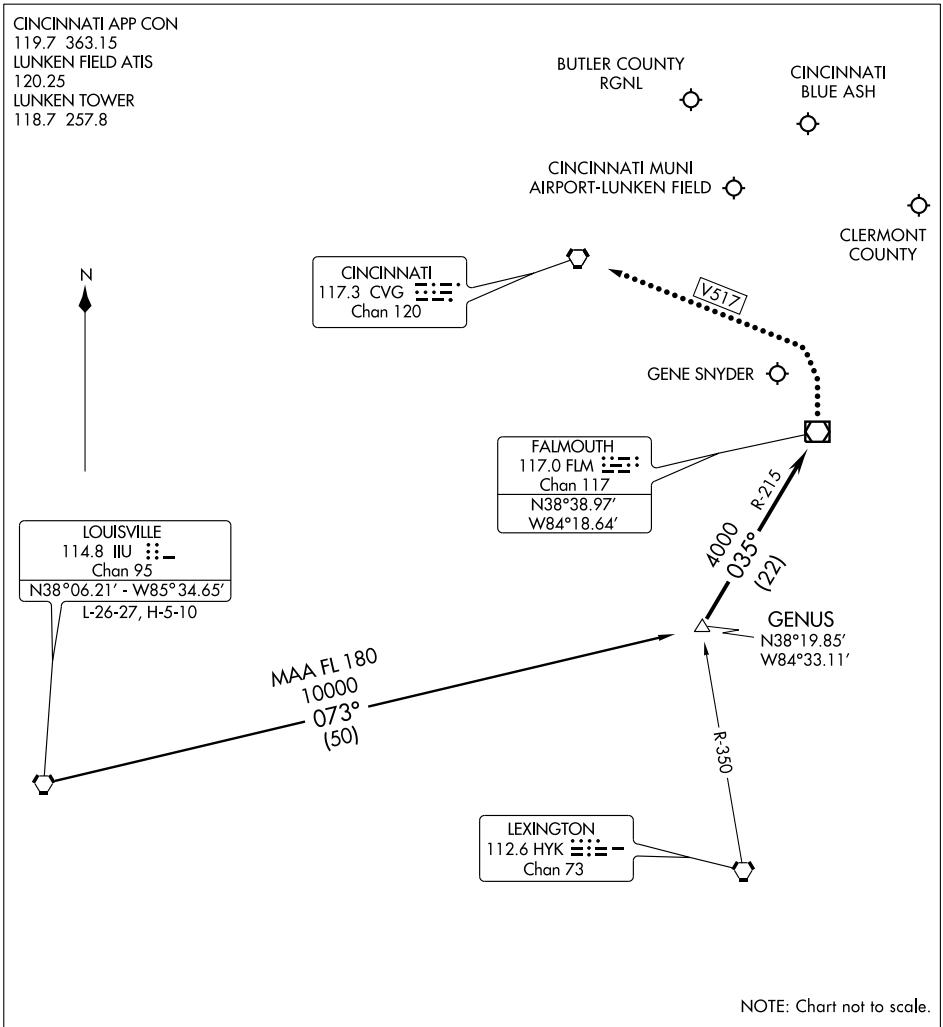
CINCE SIX ARRIVAL (TIGRR.CINCE6)

CINCINNATI, OHIO



GENUS ONE ARRIVAL

CINCINNATI, OHIO



ARRIVAL ROUTE DESCRIPTION

LOUISVILLE TRANSITION (IIU.GENUS1): From over IIU VORTAC via IIU R-073 to GENUS INT. Thence . . . .

. . . . From over GENUS INT via FLM R-215 (MEA 4000) to FLM VOR/DME. Expect radar vectors to final approach course after FLM VOR/DME.

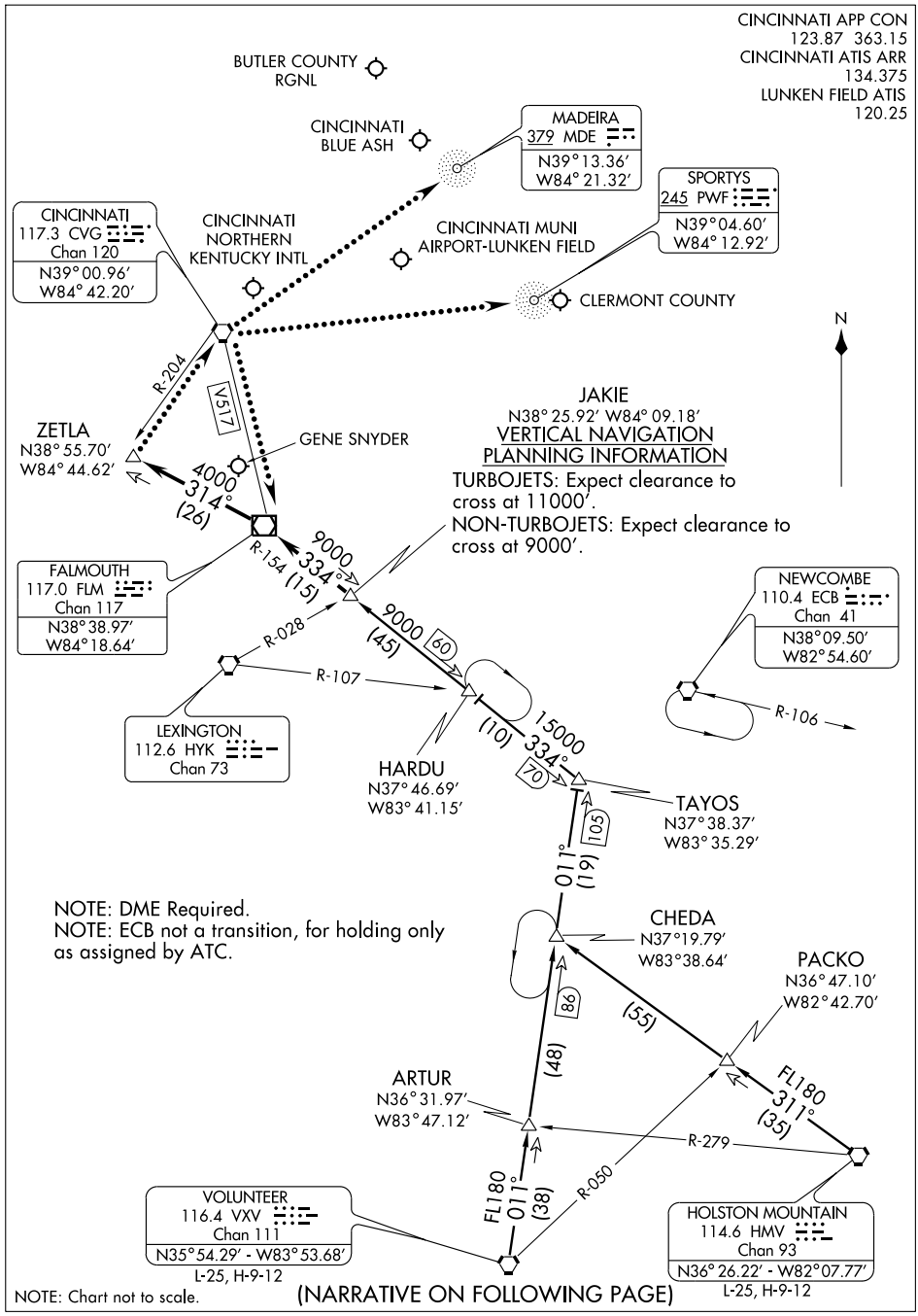
LOST COMMUNICATIONS

BUTLER COUNTY RGNL: In the event of lost communications, at FLM VOR/DME proceed V517 to CVG VORTAC. Maintain 3000 MSL until CVG VORTAC.

EC-2, 14 JAN 2010 to 11 FEB 2010

HARDU TWO ARRIVAL (JAKIE.HARDU2)

CINCINNATI, OHIO



NOTE: Chart not to scale.

(NARRATIVE ON FOLLOWING PAGE)

HARDU TWO ARRIVAL (JAKIE.HARDU2) CINCINNATI, OHIO

ARRIVAL DESCRIPTION

HOLSTON MOUNTAIN TRANSITION (HMV.HARDU2): From over HMV VORTAC via HMV R-311 and VXV R-011 to TAYOS INT, then via FLM R-154 to JAKIE INT. Thence. . . .
VOLUNTEER TRANSITION (VXV.HARDU2): From over VXV VORTAC via VXV R-011 and FLM R-154 to JAKIE INT. Thence. . . .

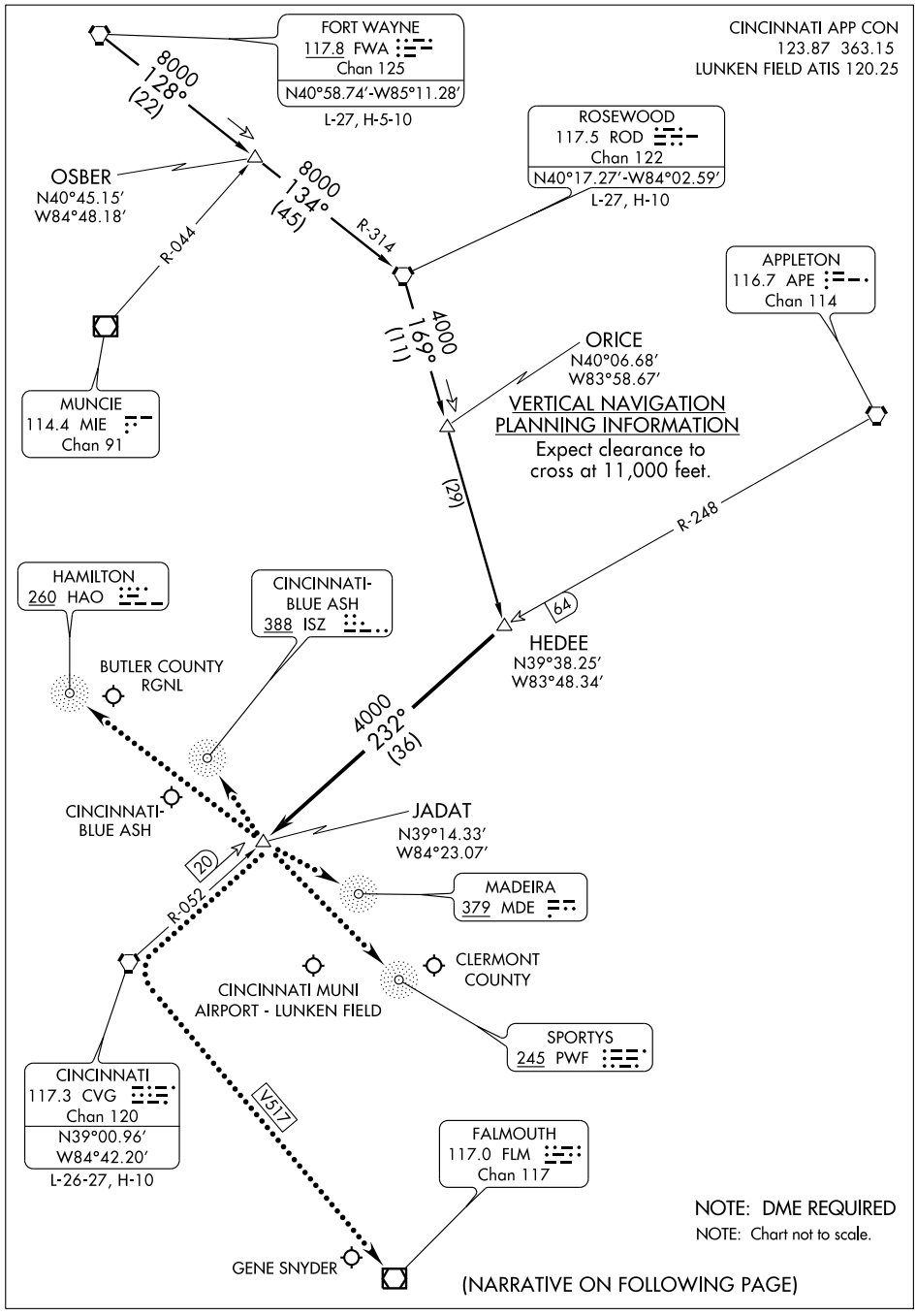
. . . .From over JAKIE INT via FLM R-154 to FLM VOR/DME, then via FLM R-314 to ZETLA INT. Expect vectors to final approach course after JAKIE INT.

LOST COMMUNICATIONS:
For Batavia/Clermont County, OH: At ZETLA INT, proceed direct to CVG VORTAC then direct SPORTYS (PWF). Maintain 4000 feet until SPORTYS (PWF).
For Butler County Rgnl, OH: At ZETLA INT, proceed direct to CVG VORTAC. Maintain 3000 feet until CVG VORTAC.
For Cincinnati/Blue Ash, OH: At ZETLA INT, proceed direct CVG VORTAC, then V517 FLM VOR/DME. Maintain 4000 feet until FLM VOR/DME.
For Cincinnati/Lunken, OH: At ZETLA INT, proceed direct CVG VORTAC then direct MADEIRA (MDE). Maintain 4000 until MADEIRA (MDE).
For Falmouth/Gene Snyder, KY: At ZETLA INT, proceed direct CVG VORTAC then via V517 FLM VOR/DME. Maintain 3000 feet until FLM VOR/DME.

SE-1, 14 JAN 2010 to 11 FEB 2010

HEDEE ONE ARRIVAL

CINCINNATI, OHIO



(NARRATIVE ON FOLLOWING PAGE)

HEDEE ONE ARRIVAL (HEDEE.HEDEE1)

ARRIVAL ROUTE DESCRIPTION

FORT WAYNE TRANSITION (FWA.HEDEE1): From over FWA VORTAC via FWA R-128 to OSBER/FWA 22 DME, then via ROD R-134 to ROD VORTAC, then via ROD R-169 to HEDEE INT. Thence. . . .
ROSEWOOD TRANSITION (ROD.HEDEE1): From over ROD VORTAC via ROD R-169 to HEDEE INT. Thence. . . .

. . . .From over HEDEE INT via CVG R-052 (MEA 4,000) to JADAT/CVG 20 DME. Expect radar vectors to final approach course at JADAT.

LOST COMMUNICATION PROCEDURE
In the event of lost communications for:

BUTLER COUNTY RGNL - At JADAT, proceed direct HAMILTON (HAO), maintain 4,000 feet until HAMILTON (HAO).
CINCINNATI MUNI AIRPORT - LUNKEN FIELD - At JADAT, proceed direct MADEIRA (MDE), maintain 4,000 feet until MADEIRA (MDE).
CINCINNATI BLUE ASH - At JADAT, proceed direct BLUE ASH (ISZ), maintain 4,000 feet until BLUE ASH (ISZ).
CLERMONT COUNTY - At JADAT, proceed direct SPORTYS (PWF), maintain 4,000 feet until SPORTYS (PWF).
GENE SNYDER - At JADAT, proceed direct CVG VORTAC then via V517 to FLM VOR/DME, maintain 4,000 feet until FLM VOR/DME.

EC-2, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-RQF	APP CRS	Rwy ldg	5500
109.75	295°	TDZE	619
Chan 34 (Y)		Apt Elev	633

ILS or LOC RWY 29

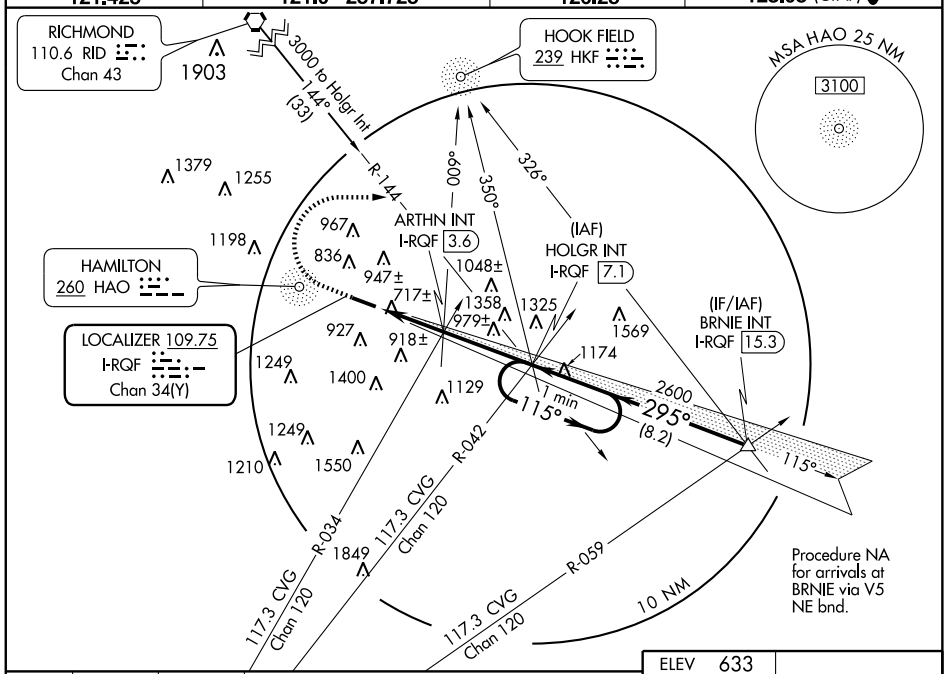
HAMILTON / BUTLER COUNTY RGNL (HAO)

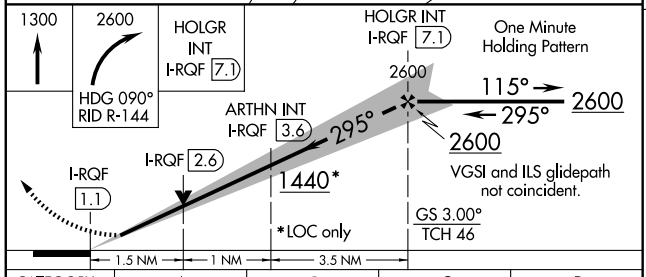
If local altimeter setting not received, use Cincinnati Muni Airport-Lunken Field altimeter setting and increase all DAs 59 feet, and all MDAs 60 feet.
VDP NA when using Cincinnati Muni Airport-Lunken Field altimeter setting.
Inoperative table does not apply to S-ILS 29. For inoperative MALSR, increase S-LOC 29 Cat A visibility to 1 mile.

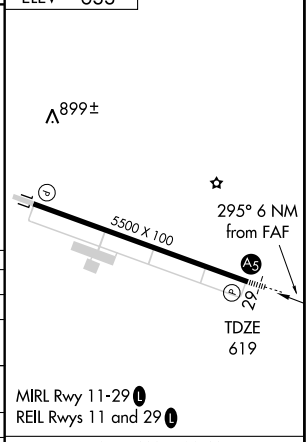
MALSR

MISSED APPROACH: Climb to 1300 then climbing right turn to 2600 via heading 090° and RID VORTAC R-144 to HOLGR Int/I-RQF 7.1 DME and hold.

ASOS	CINCINNATI APP CON	CLNC DEL	UNICOM
121.425	121.0 257.725	126.25	123.05 (CTAF) L





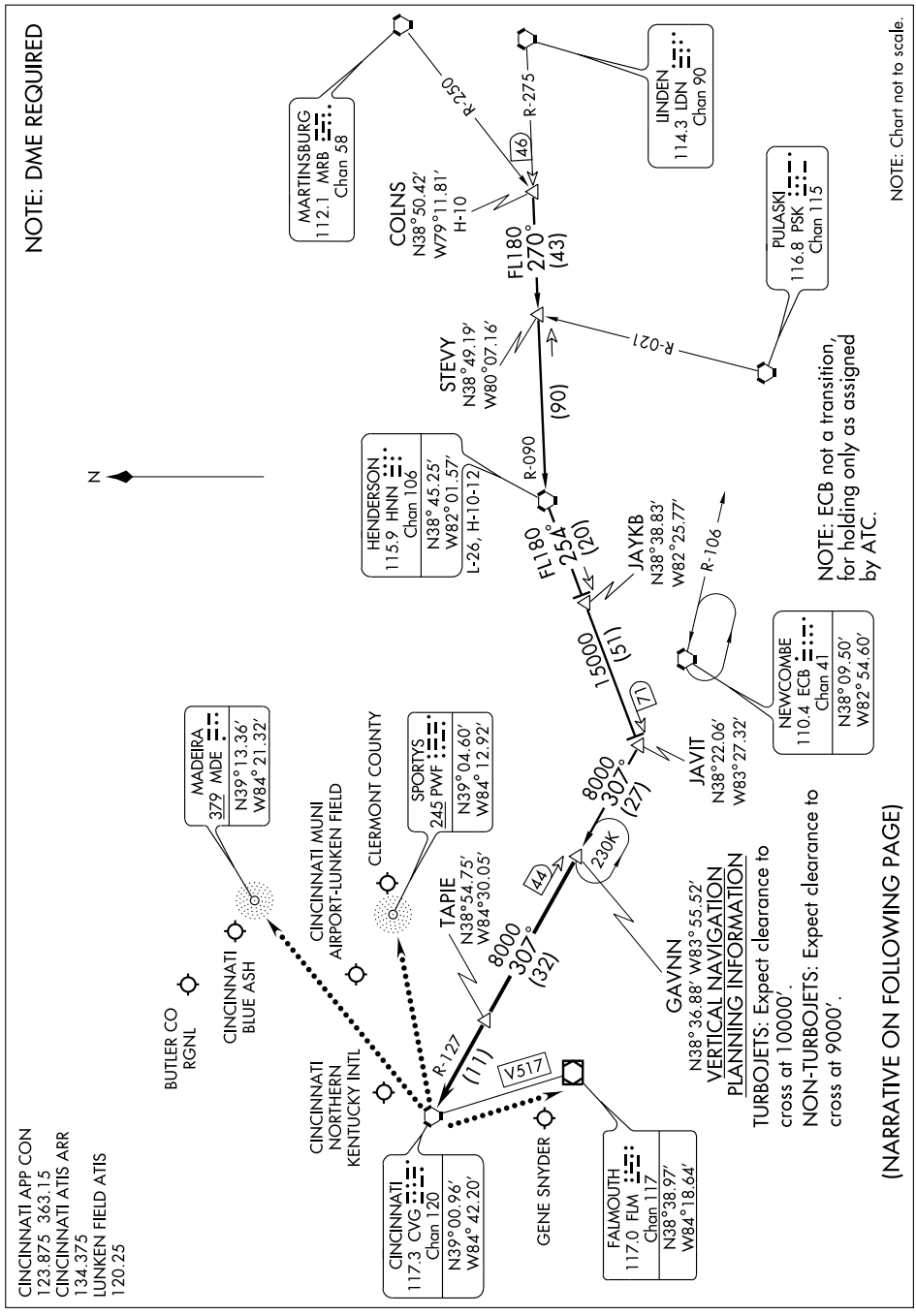


CATEGORY	A	B	C	D
S-ILS 29	819-¾ 200 (200-¾)			
S-LOC 29	1440-¾ 821 (900-¾)		1440-2 821 (900-2)	1440-2¼ 821 (900-2¼)
CIRCLING	1440-1 807 (900-1)	1440-1¼ 807 (900-1¼)	1440-2½ 807 (900-2½)	1440-2¾ 807 (900-2¾)
ARTHN FIX MINIMUMS				
S-LOC 29	1120-¾ 501 (500-¾)		1120-1 501 (500-1)	
CIRCLING	1200-1 567 (500-1)	1280-1 647 (700-1)	1300-1¾ 667 (700-2¾)	1320-2¼ 687 (700-2¼)

FAF to MAP 6 NM					
Knots	60	90	120	150	180
Min:Sec	6:00	4:00	3:00	2:24	2:00

JAVIT TWO ARRIVAL (GAVNN.JAVIT2)

CINCINNATI, OHIO



(NARRATIVE ON FOLLOWING PAGE)

JAVIT TWO ARRIVAL (GAVNN.JAVIT2)

ARRIVAL DESCRIPTION

COLNS TRANSITION (COLNS.JAVIT2): From over COLNS INT via HNN R-090 to HNN VORTAC then via HNN R-254 to JAVIT INT, then via CVG R-127 to GAVNN INT. Thence...

HENDERSON TRANSITION (HNN.JAVIT2): From over HNN VORTAC via HNN R-254 to JAVIT INT, then via CVG R-127 to GAVNN INT. Thence. . . .

. . . .From over GAVNN INT via CVG R-127 to TAPIE , then via CVG R-127 to CVG VORTAC.

Expect vectors to final approach course after GAVNN.

LOST COMMUNICATIONS:

For Batavia/Clermont County, OH: At CVG VORTAC, proceed direct SPORTYS (PWF) maintain 4000 feet until SPORTYS (PWF).

For Cincinnati/Lunken, OH: At CVG VORTAC, proceed direct MADEIRA (MDE) maintain 4000 feet until MADEIRA (MDE).

For Falmouth/Gene Snyder, KY: At CVG VORTAC, proceed via V517 FLM VOR/DME, maintain 3000 feet until FLM VOR/DME.

SE-1, 14 JAN 2010 to 11 FEB 2010

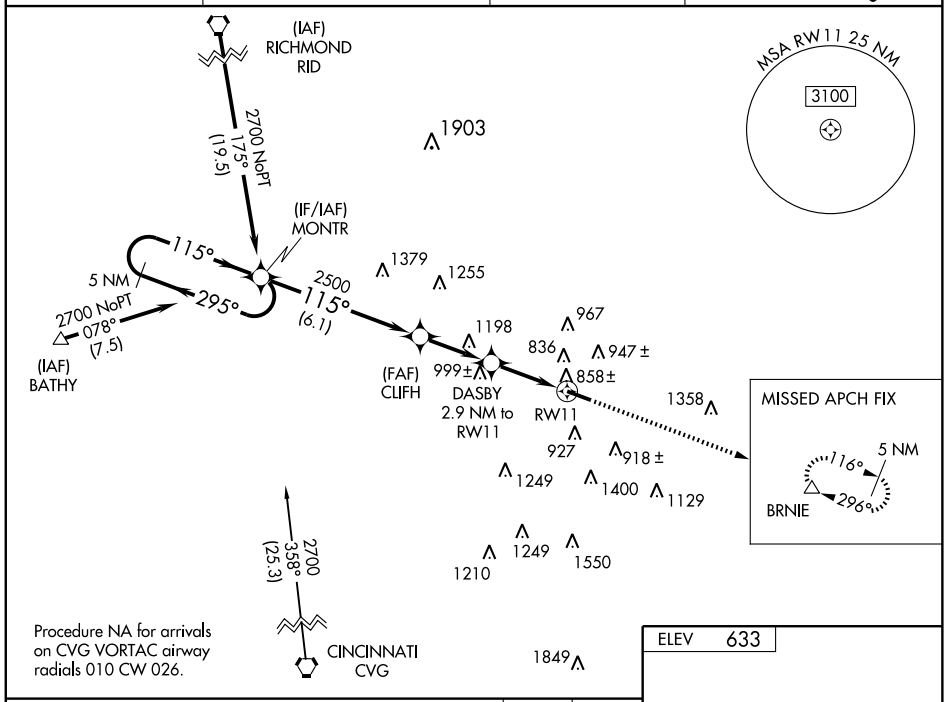
WAAS CH 56600 W11A	APP CRS 115°	Rwy ldg 5500 TDZE 632 Apt Elev 633

RNAV (GPS) RWY 11
HAMILTON/BUTLER COUNTY RGNL (HAO)

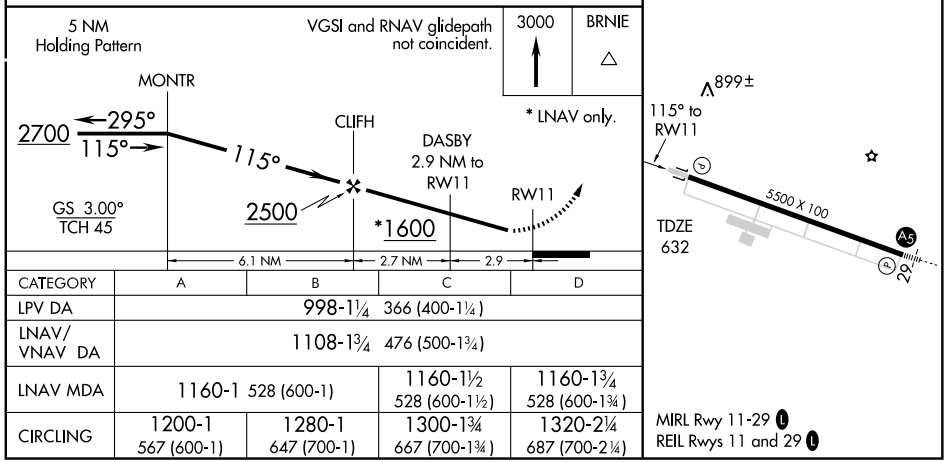
If local altimeter setting not received, use Cincinnati Muni Airport-Lunken Field altimeter setting and increase all DAs 59 feet and all MDAs 60 feet. Baro-VNAV NA when using Cincinnati Muni Airport-Lunken Field altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 3000 direct BRNIE and hold.

ASOS	CINCINNATI APP CON	CLNC DEL	UNICOM
121.425	121.0 257.725	126.25	123.05 (CTAF) L



Procedure NA for arrivals on CVG VORTAC airway radials 010 CW 026.



CATEGORY	A	B	C	D
LPV DA	998-1¼ 366 (400-1¼)			
LNAV/ VNAV DA	1108-1¾ 476 (500-1¾)			
LNAV MDA	1160-1 528 (600-1)		1160-1½ 528 (600-1½)	1160-1¾ 528 (600-1¾)
CIRCLING	1200-1 567 (600-1)	1280-1 647 (700-1)	1300-1¾ 667 (700-1¾)	1320-2¼ 687 (700-2¼)

MIRL Rwy 11-29 L
REIL Rwys 11 and 29 L

EC-2, 14 JAN 2010 to 11 FEB 2010

WAAS CH 61300 W29A	APP CRS 296°	Rwy ldg 5500 TDZE 619 Apt Elev 633

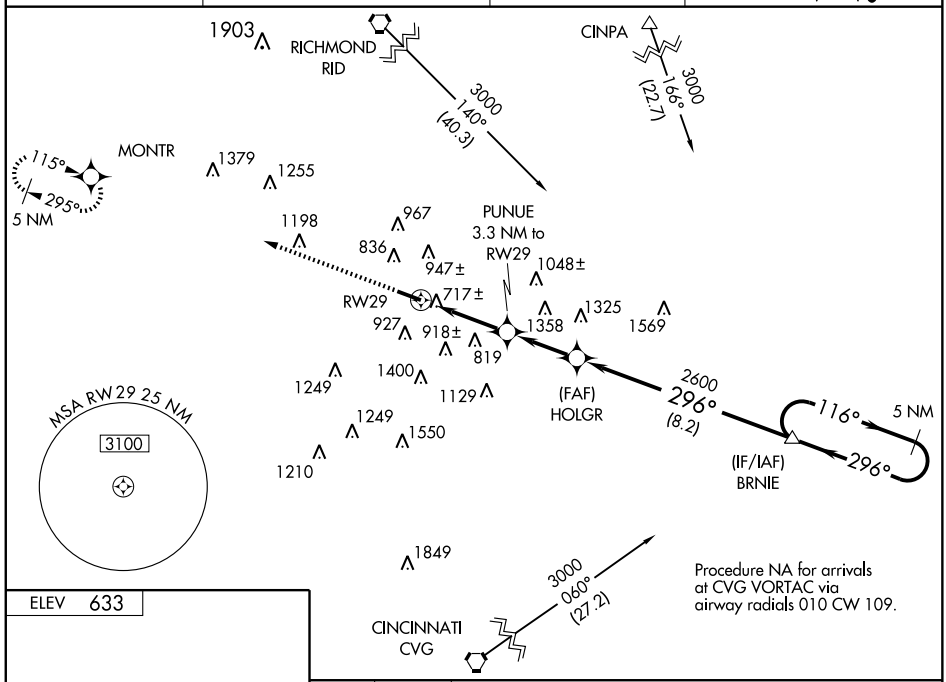
RNAV (GPS) RWY 29
HAMILTON/BUTLER COUNTY RGNL (HAO)

If local altimeter setting not received, use Cincinnati Muni Airport-Lunken Field altimeter setting and increase all DAs 59 feet and all MDAs 60 feet. VDP NA when using Cincinnati Muni Airport-Lunken Field altimeter setting. Baro-VNAV NA when using Cincinnati Muni Airport-Lunken Field altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 48°C (118°F). For inoperative MALSR, increase LPV visibility to 1¼ all Cats and LNAV Cat A/B visibility to 1. DME/DME RNP-0.3 NA.

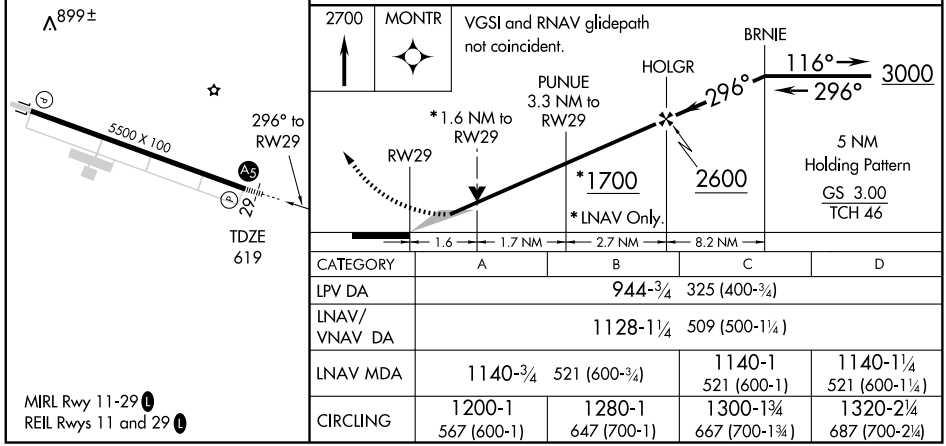
MALSR

MISSED APPROACH: Climb to 2700 direct MONTR and hold.

ASOS	CINCINNATI APP CON	CLNC DEL	UNICOM
121.425	121.0 257.725	126.25	123.05 (CTAF) L



Procedure NA for arrivals at CVG VORTAC via airway radials 010 CW 109.



CATEGORY	A	B	C	D
LPV DA	944-¾ 325 (400-¾)			
LNAV/VNAV DA	1128-1¼ 509 (500-1¼)			
LNAV MDA	1140-¾ 521 (600-¾)		1140-1 521 (600-1)	1140-1¼ 521 (600-1¼)
CIRCLING	1200-1 567 (600-1)	1280-1 647 (700-1)	1300-1¾ 667 (700-1¾)	1320-2¼ 687 (700-2¼)

MIRL Rwy 11-29 L
REIL Rwys 11 and 29 L

EC-2, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	2583
185°	TDZE	584
	Apt Elev	584

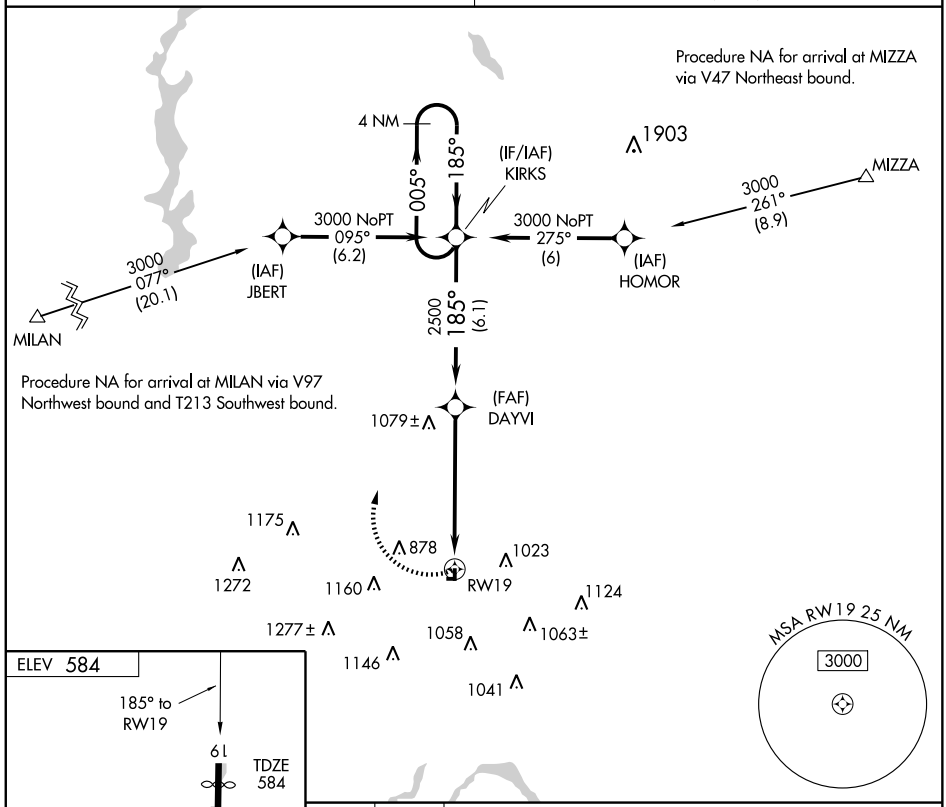
RNAV (GPS) RWY 19
HARRISON/CINCINNATI WEST (I67)

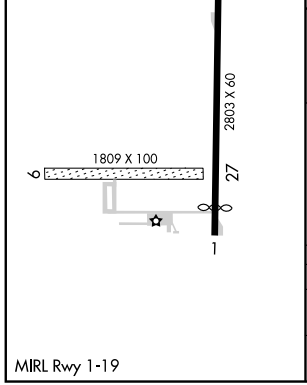
NA

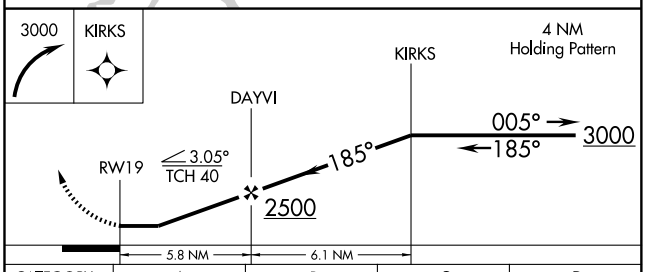
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Use Butler Co Rgnl altimeter setting, when not received, use Cincinnati/Northern Kentucky Intl altimeter setting and increase all MDA 40 feet.

MISSED APPROACH: Climbing right turn 3000 direct KIRKS and hold.

CINCINNATI APP CON	UNICOM
128.7 254.25	123.0 (CTAF)







CATEGORY	A	B	C	D
LNAV MDA	1380-1 796 (800-1)	1380-1¼ 796 (800-1¼)	NA	
CIRCLING	1380-1 796 (800-1)	1380-1¼ 796 (800-1¼)	NA	

MIRL Rwy 1-19

EC-2, 14 JAN 2010 to 11 FEB 2010

HARRISON, OHIO

AL-6433 (FAA)

VORTAC CVG 117.3 Chan 120	APP CRS 171°	Rwy ldg 2583 TDZE 584 Apt Elev 584

VOR RWY 19

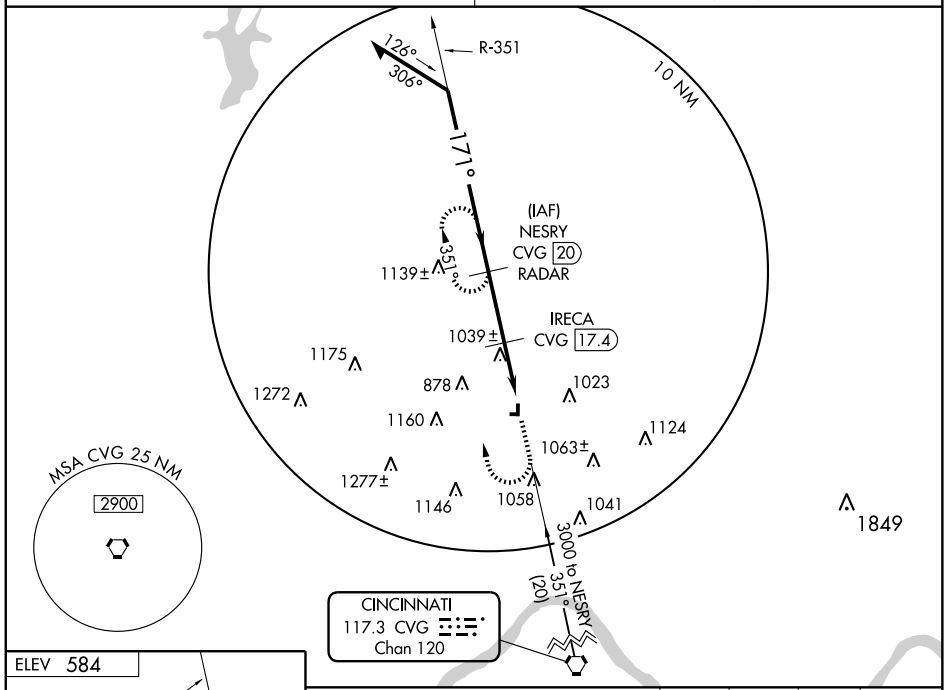
HARRISON/CINCINNATI WEST (I67)

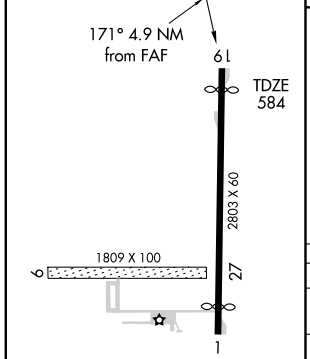
T
A NA

DME or RADAR required.
Use Butler Co Rgnl altimeter setting, when not received, use Cincinnati/Northern Kentucky Intl altimeter setting and increase all MDA 40 feet, and S-19 Cat. A visibility ¼ mile.

MISSED APPROACH: Climb to 2000, then climbing right turn to 2600 via CVG VORTAC R-351 to NESRY/ CVG 20 DME/RADAR and hold.

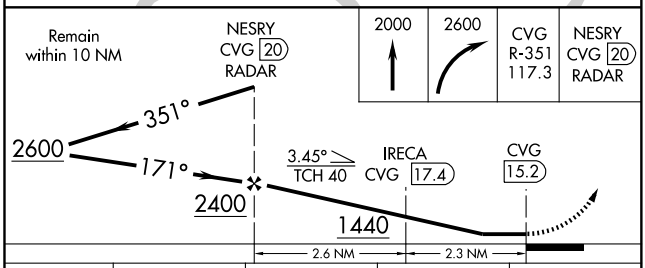
CINCINNATI APP CON	UNICOM
128.7 254.25	123.0 (CTAF)





MIRL Rwy 1-19

FAF to MAP 4.9 NM					
Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38



CATEGORY	A	B	C	D
S-19	1440-1 856 (900-1)	1440-1¼ 856 (900-1¼)	NA	
CIRCLING	1440-1 856 (900-1)	1440-1¼ 856 (900-1¼)	NA	
IRECA FIX MINIMUMS				
S-19	1340-1 756 (800-1)	1340-1¼ 756 (800-1¼)	NA	
CIRCLING	1340-1 756 (800-1)	1340-1¼ 756 (800-1¼)	NA	

EC-2, 14 JAN 2010 to 11 FEB 2010

NDB HOC 278	APP CRS 230°	Rwy ldg 3520 TDZE 950 Apt Elev 978

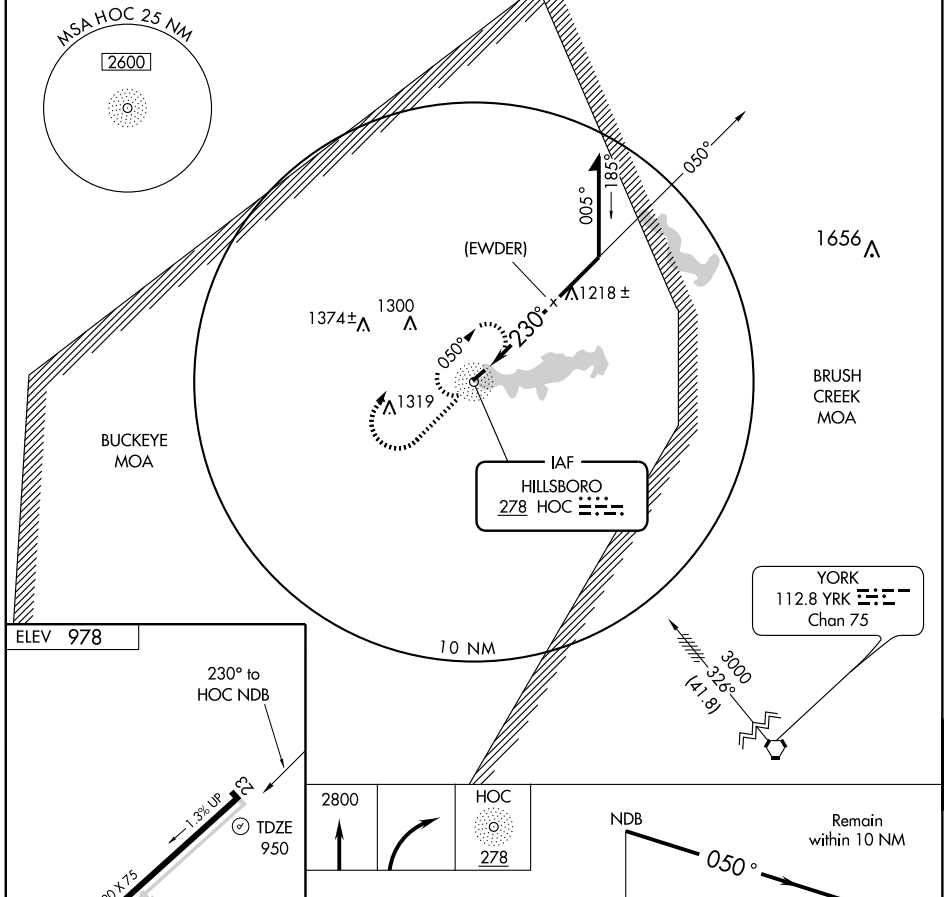
NDB or GPS RWY 23
HILLSBORO/ HIGHLAND COUNTY (HOC)

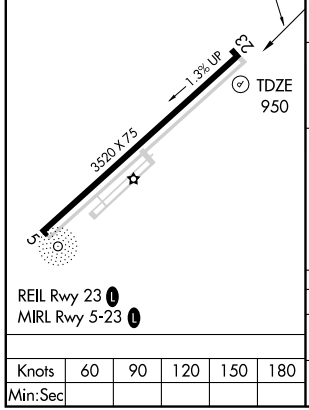
Use Cincinnati Lunken Field altimeter setting.

NA

MISSED APPROACH: Climb to 2800 then right turn direct HOC NDB and hold.

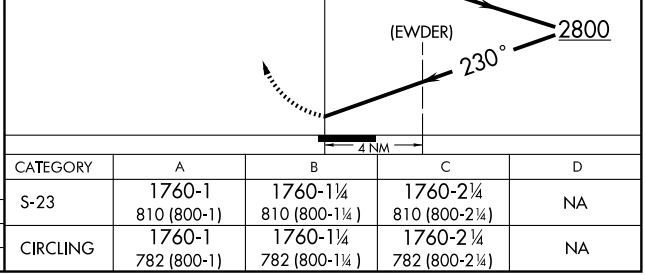
AWOS-3	INDIANAPOLIS CENTER	UNICOM
118.175	134.0 290.5	123.05 (CTAF) L





REIL Rwy 23 L
MIRL Rwy 5-23 L

Knots	60	90	120	150	180
Min:Sec					



CATEGORY	A	B	C	D
S-23	1760-1 810 (800-1)	1760-1¼ 810 (800-1¼)	1760-2¼ 810 (800-2¼)	NA
CIRCLING	1760-1 782 (800-1)	1760-1¼ 782 (800-1¼)	1760-2¼ 782 (800-2¼)	NA

HILLSBORO, OHIO

AL-6045 (FAA)

VOR/DME MXQ 112.9 Chan 76	APP CRS 144°	Rwy ldg N/A TDZE N/A Apt Elev 978

VOR/DME or GPS-A

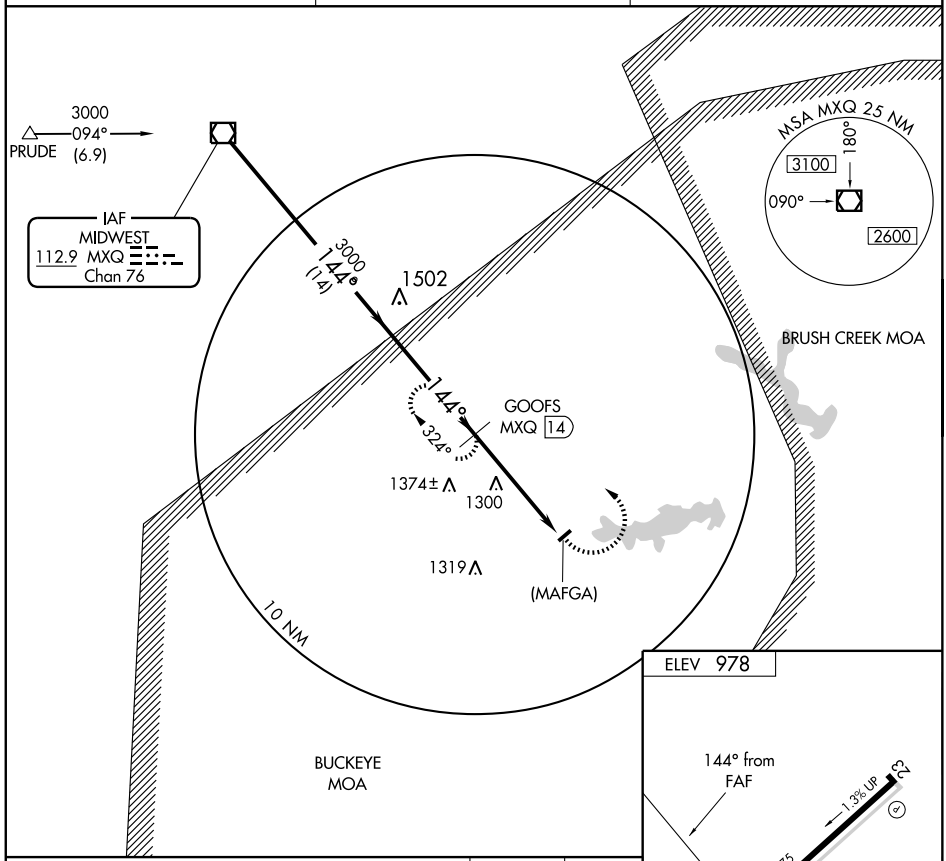
HILLSBORO/HIGHLAND COUNTY (HOC)

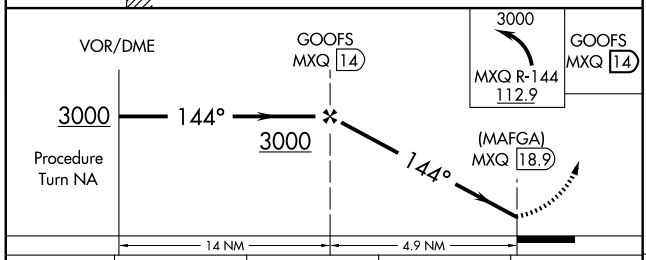
Use Cincinnati Lunken Field altimeter setting.

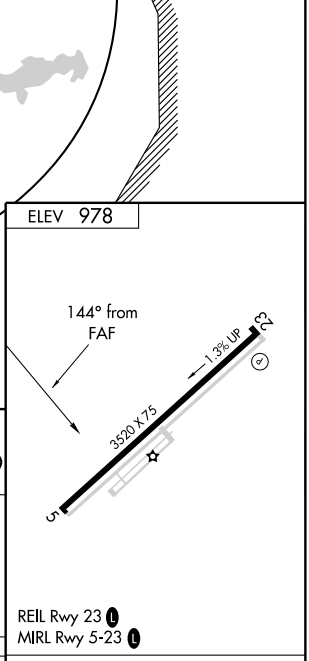
NA

MISSED APPROACH: Climbing left turn to 3000 via MXQ R-144 to GOOFS 14 DME and hold.

AWOS-3	INDIANAPOLIS CENTER	UNICOM
118.175	134.0 290.5	123.05 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	2000-1¼ 1022 (1100-1¼)	2000-1½ 1022 (1100-1½)	2000-3 1022 (1100-3)	NA

Knots	60	90	120	150	180
Min:Sec					

EC-2, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	4870
010°	TDZE	722
	Apt Elev	726

RNAV (GPS) RWY 1

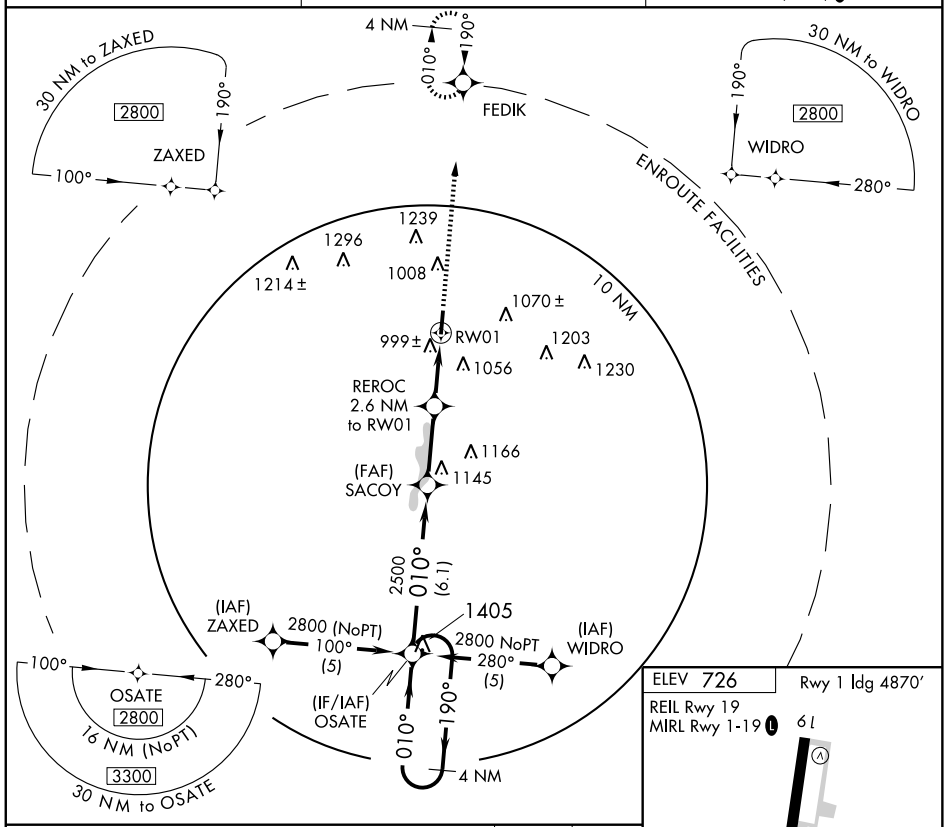
JACKSON / JAMES A. RHODES (I43)

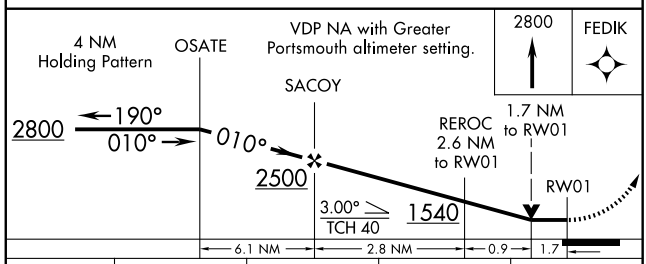
When local altimeter setting not received, use Greater Portsmouth altimeter setting and increase all MDA 60 feet, and Cat C/D visibilities ¼ mile, increase Circling Cat B/C/D visibilities ¼ mile. DME/DME RNP-0.3 NA.

NA

MISSED APPROACH: Climb to 2800 direct FEDIK WP and hold.

AWOS-3	HUNTINGTON APP CON	UNICOM
118.825	128.4 270.1	122.7 (CTAF) L

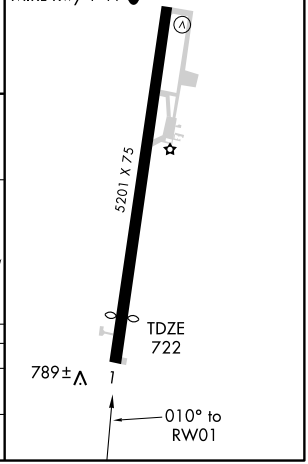




CATEGORY	A	B	C	D
LNAV MDA	1300-1 578 (600-1)		1300-1½ 578 (600-1½)	1300-1¾ 578 (600-1¾)
CIRCLING	1300-1 574 (600-1)	1420-1 694 (700-1)	1420-2 694 (700-2)	1420-2¼ 694 (700-2¼)

ELEV 726 | Rwy 1 ldg 4870′

REIL Rwy 19
MIRL Rwy 1-19 L



APP CRS	Rwy ldg	5201
190°	TDZE	726
	Apt Elev	726

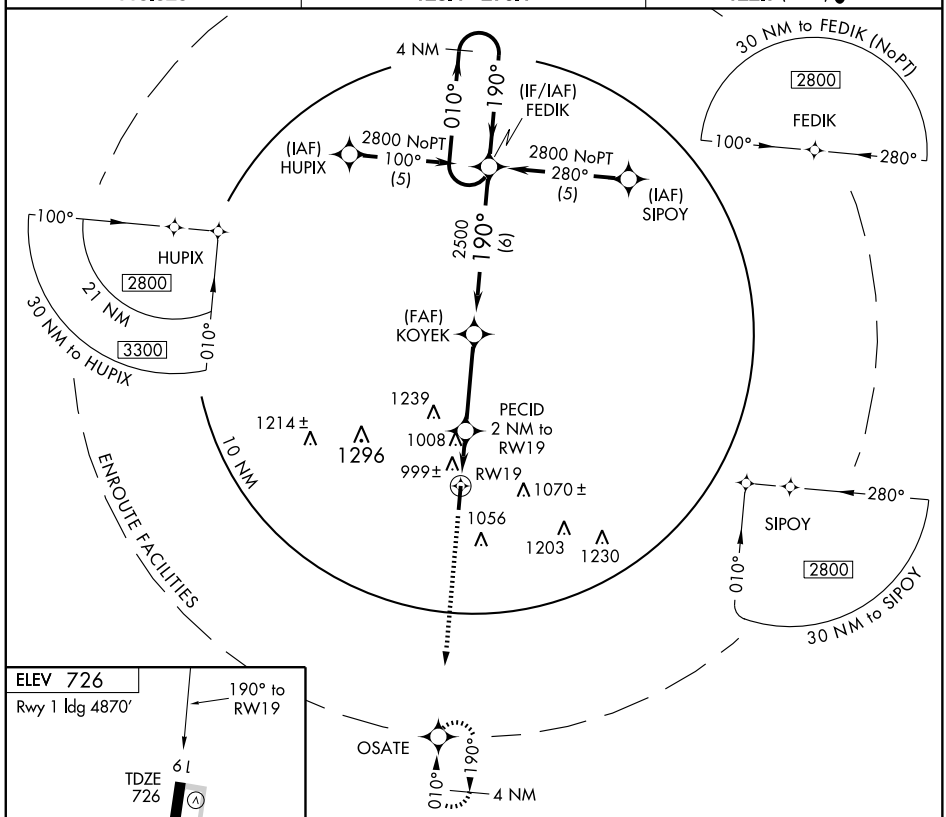
RNAV (GPS) RWY 19

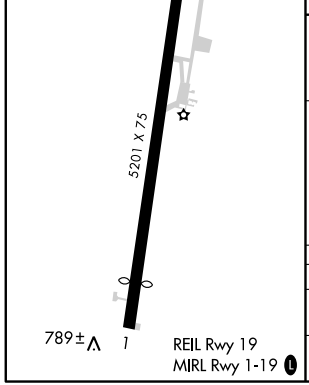
JACKSON/ JAMES A. RHODES (I43)

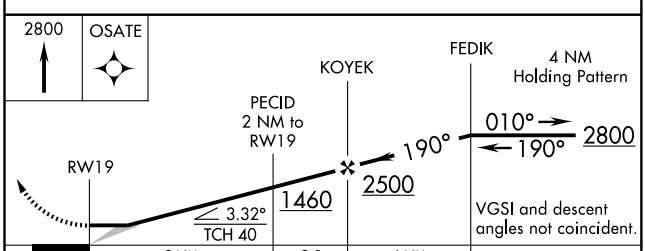
DME/DME RNP-0.3 NA.
When local altimeter setting not received, use Greater Portsmouth altimeter setting and increase all MDAs 60 feet, increase Circling Cat B/C/D visibilities ¼ mile.

MISSED APPROACH: Climb to 2800 direct OSATE WP and hold.

AWOS-3	HUNTINGTON APP CON	UNICOM
118.825	128.4 270.1	122.7 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	1260-1 534 (600-1)		1260-1½ 534 (600-1½)	1260-1¾ 534 (600-1¾)
CIRCLING	1300-1 574 (600-1)	1420-1 694 (700-1)	1420-2 694 (700-2)	1420-2¼ 694 (700-2¼)

VORTAC YRK	APP CRS	Rwy ldg	N/A
112.8	048°	TDZE	N/A
Chan 75		Apt Elev	726

VOR/DME-A

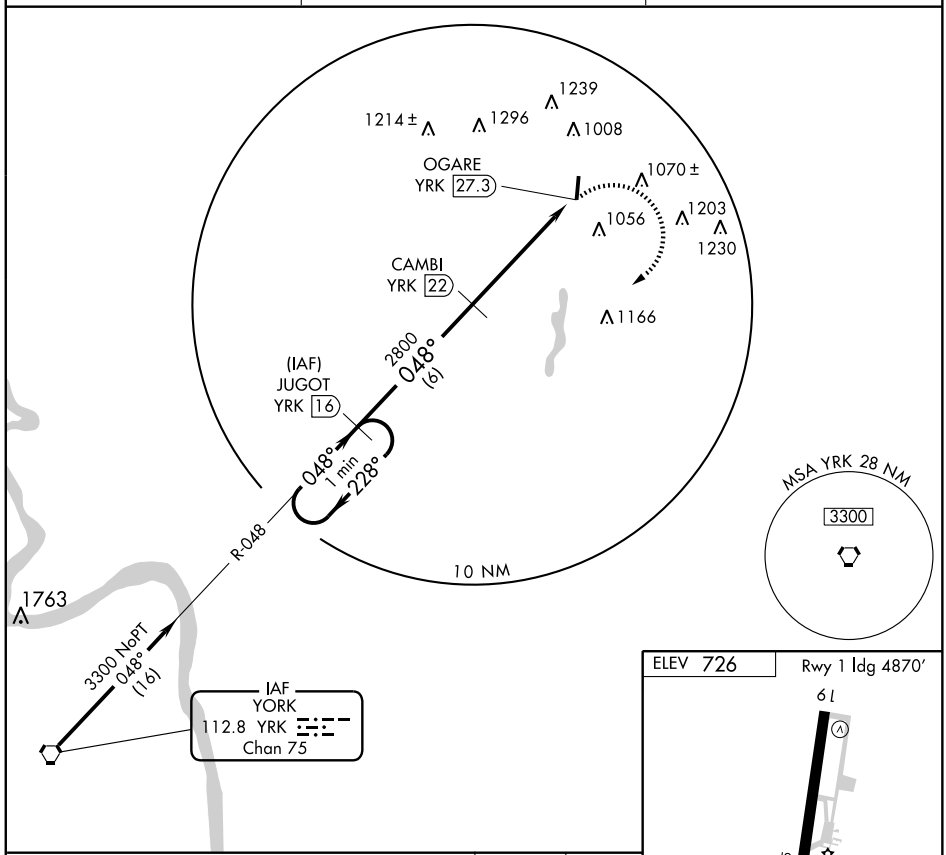
JACKSON/JAMES A. RHODES (I43)

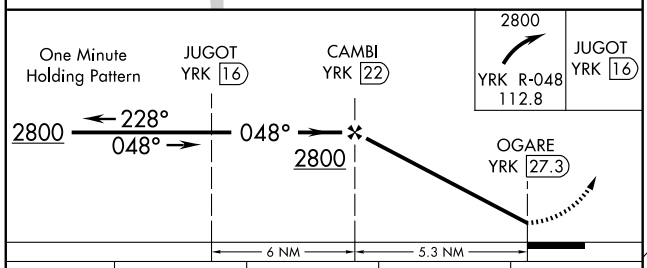
When local altimeter setting not received, use Greater Portsmouth altimeter setting and increase all MDA 60 feet, and Cat C/D visibilities ¼ mile.

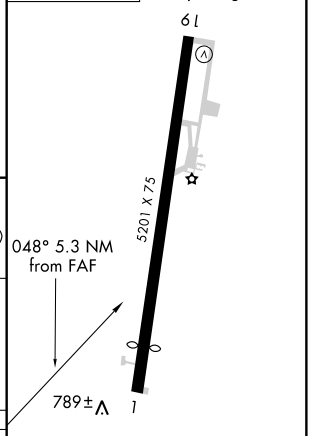
NA

MISSED APPROACH: Climbing right turn to 2800 via YRK R-048 to JUGOT/16 DME and hold.

AWOS-3	HUNTINGTON APP CON	UNICOM
118.825	128.4 270.1	122.7 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	1360-1 634 (700-1)	1420-1¼ 694 (700-1¼)	1420-2 694 (700-2)	1420-2¼ 694 (700-2¼)

REIL Rwy 19
MIRL Rwy 1-19 L

EC-2. 14 JAN 2010 to 11 FEB 2010

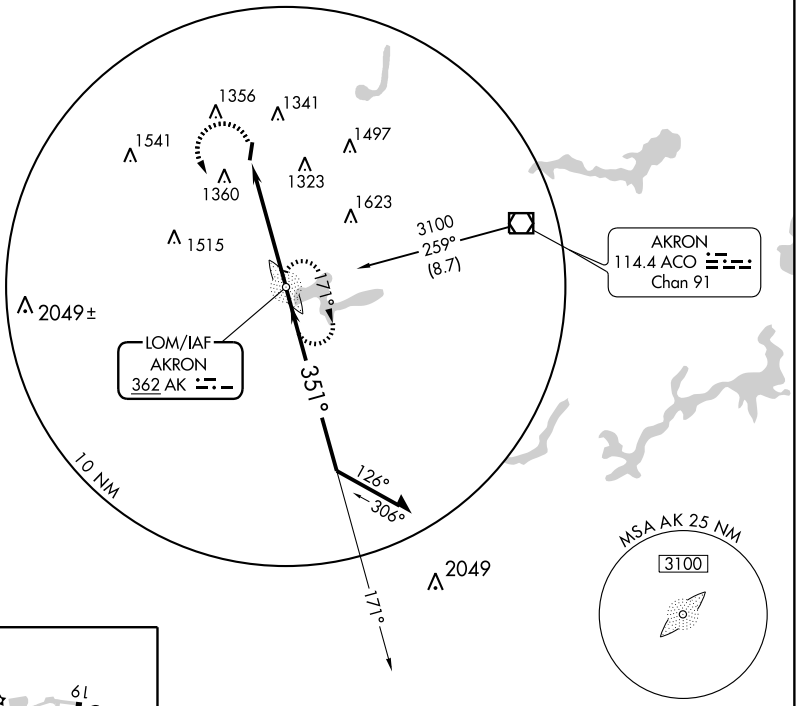
LOM AK	APP CRS	Rwy ldg	3950
362	351°	TDZE	1128
		Apt Elev	1134

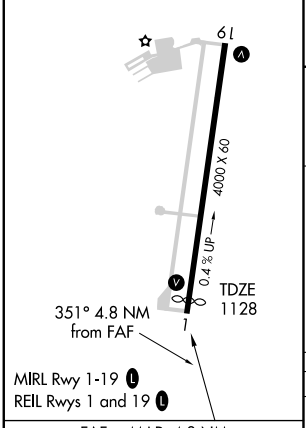
NDB RWY 1
KENT STATE UNIVERSITY (1G3)

NA Use Akron-Canton altimeter setting.

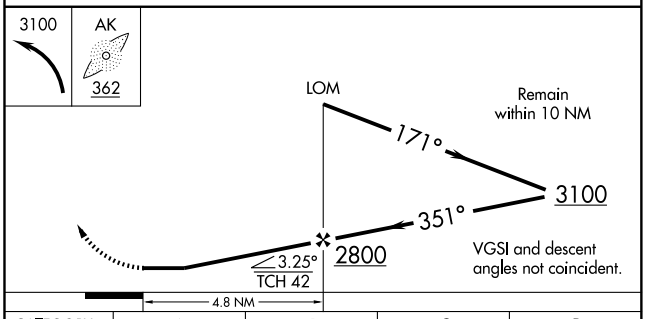
MISSED APPROACH: Climbing left turn to 3100 direct AK LOM and hold.

AKRON-CANTON APP CON ★	CLNC DEL	UNICOM	
118.6 371.875	125.65	122.725 (CTAF)	122.9 L





FAF to MAP 4.8 NM					
Knots	60	90	120	150	180
Min:Sec	4:48	3:12	2:24	1:55	1:36



CATEGORY	A	B	C	D
S-1	1760-1	632 (700-1)	1760-1¾ 632 (700-1¾)	NA
CIRCLING	1760-1	626 (700-1)	1760-1¾ 626 (700-1¾)	NA

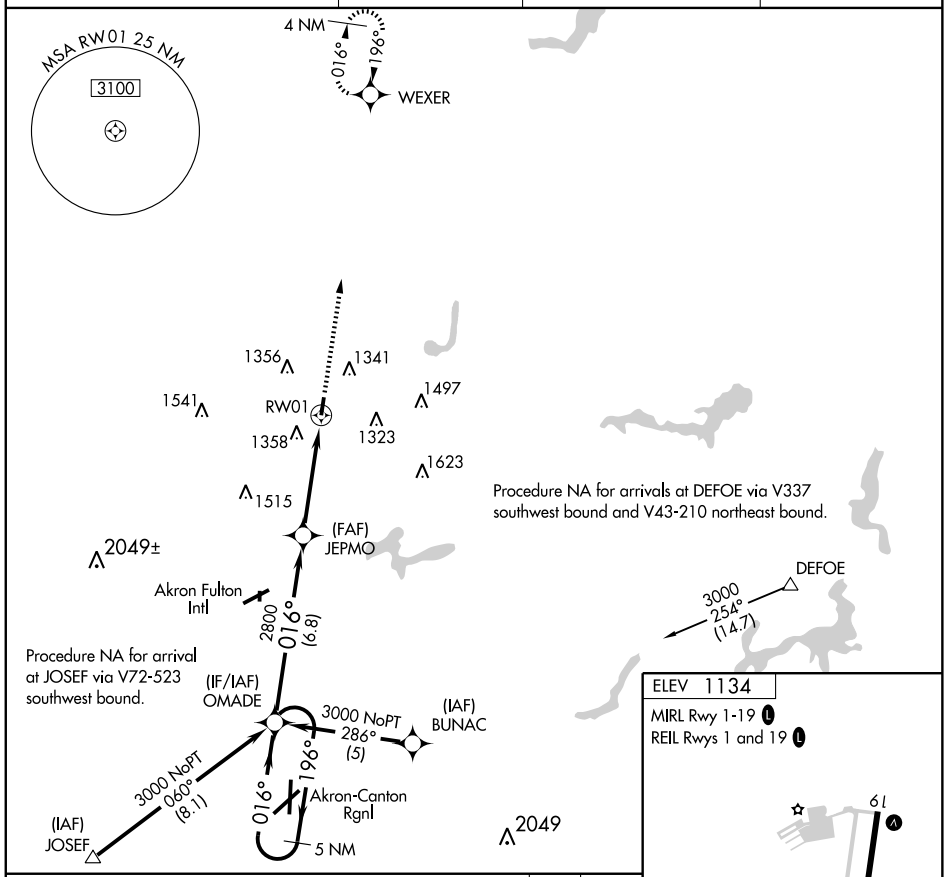
WAAS CH 61001 W01A	APP CRS 016°	Rwy ldg 3950 TDZE 1127 Apt Elev 1134

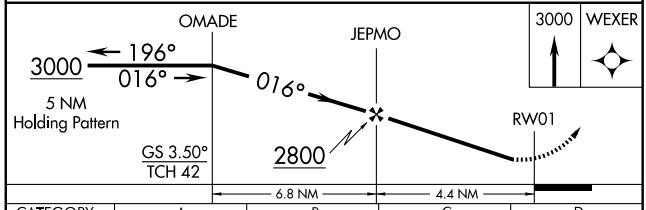
RNAV (GPS) RWY 1
KENT STATE UNIVERSITY (1G3)

NA DME/DME RNP-0.3 NA. Use Akron Fulton Intl altimeter setting; if not received use Akron-Canton Rgnl altimeter setting and increase all DAs/MDAs 20 feet. Visibility reduction by helicopters NA. Baro-VNAV NA.

MISSED APPROACH: Climb to 3000 direct WEXER and hold.

AKRON-CANTON APP CON ★	CLNC DEL	UNICOM	
118.6 371.875	125.65	122.725 (CTAF)	122.9 L



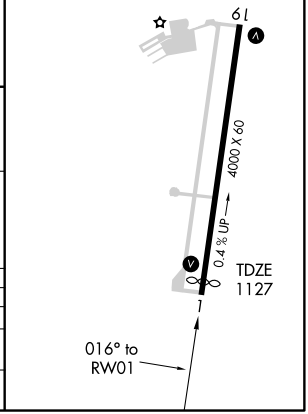


CATEGORY	A	B	C	D
LPV DA	1497-1¼ 370 (400-1¼)			NA
LNAV MDA	1660-1 533 (600-1)		1660-1½ 533 (600-1½)	NA
CIRCLING	1760-1¼ 626 (700-1¼)		1760-1¾ 626 (700-1¾)	NA

ELEV 1134

MIRL Rwy 1-19 L

REIL Rwys 1 and 19 L



EC-2, 14 JAN 2010 to 11 FEB 2010

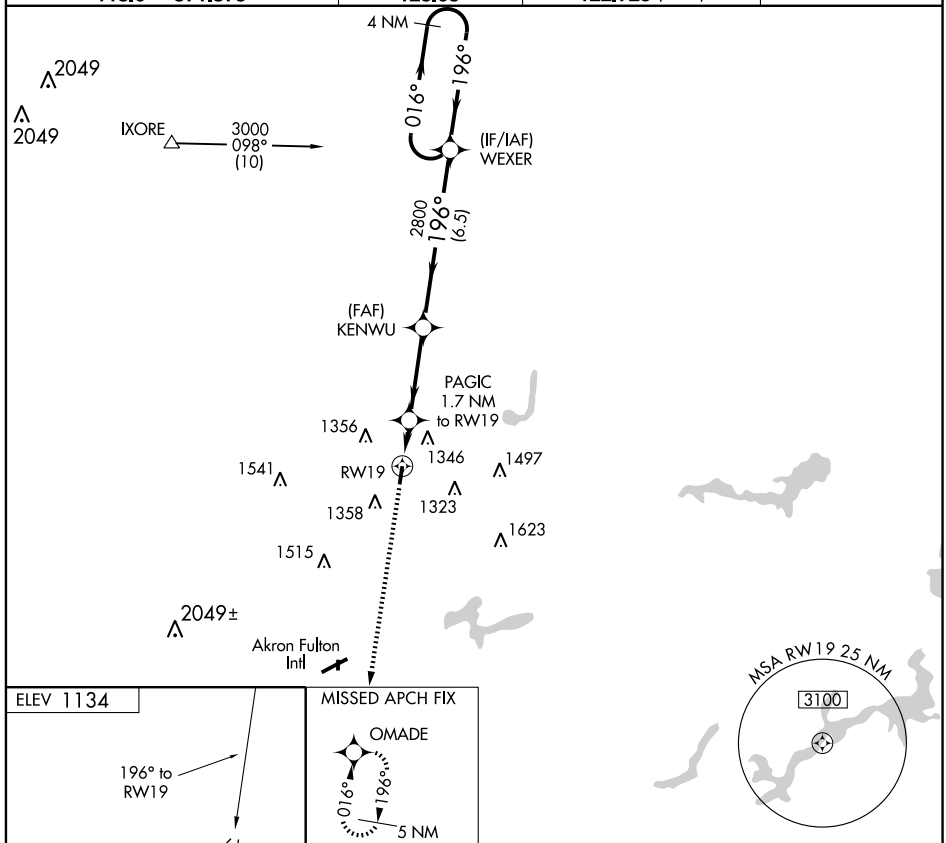
WAAS CH 65701 W19A	APP CRS 196°	Rwy ldg 4000 TDZE 1134 Apt Elev 1134

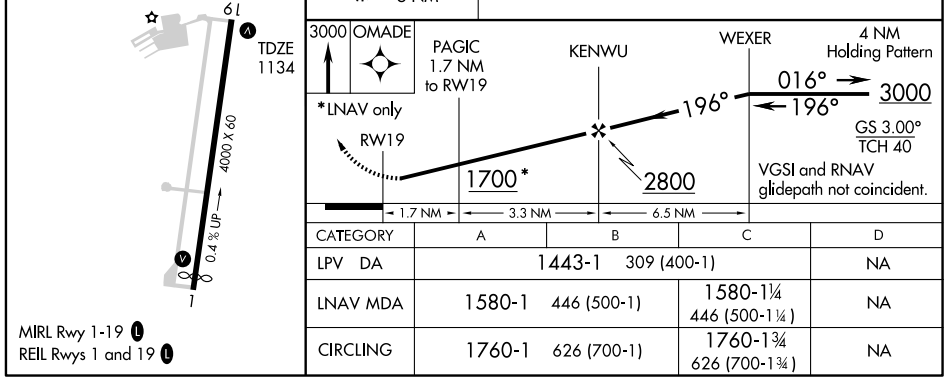
RNAV (GPS) RWY 19
KENT STATE UNIVERSITY (1G3)

NA DME/DME RNP-0.3 NA. Use Akron Fulton Intl altimeter setting; if not received use Akron-Canton Rgnl altimeter setting, and increase all DAs/MDAs 20 feet. Visibility reduction by helicopters NA. Baro-VNAV NA.

MISSED APPROACH: Climb to 3000 direct OMADE and hold.

AKRON-CANTON APP CON ★	CLNC DEL	UNICOM	
118.6 371.875	125.65	122.725 (CTAF)	122.9 L





CATEGORY	A	B	C	D
LPV DA	1443-1 309 (400-1)			NA
LNAV MDA	1580-1 446 (500-1)		1580-1¼ 446 (500-1¼)	NA
CIRCLING	1760-1 626 (700-1)		1760-1¾ 626 (700-1¾)	NA

MIRL Rwy 1-19 L
REIL Rwys 1 and 19 L

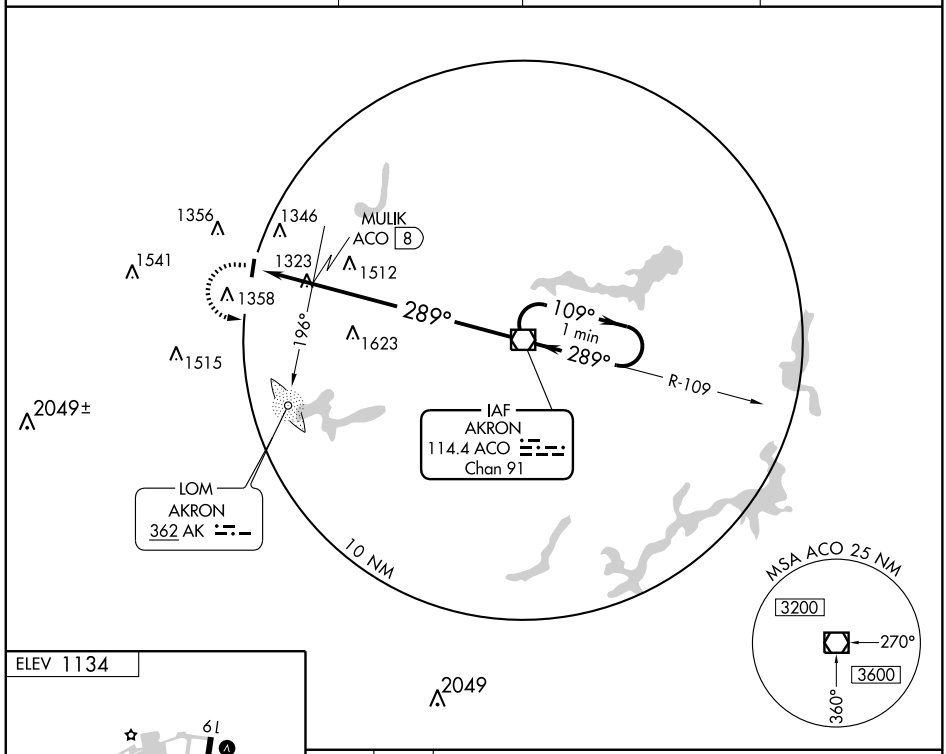
EC-2, 14 JAN 2010 to 11 FEB 2010

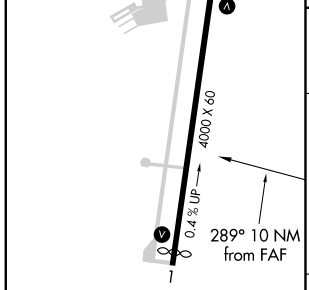
VOR/DME ACO 114.4 Chan 91	APP CRS 289°	Rwy ldg N/A TDZE N/A Apt Elev 1134

VOR-A
KENT STATE UNIVERSITY (1G3)

NA Use Akron-Canton altimeter setting.	MISSED APPROACH: Climbing left turn to 3000 direct ACO VOR/DME and hold.

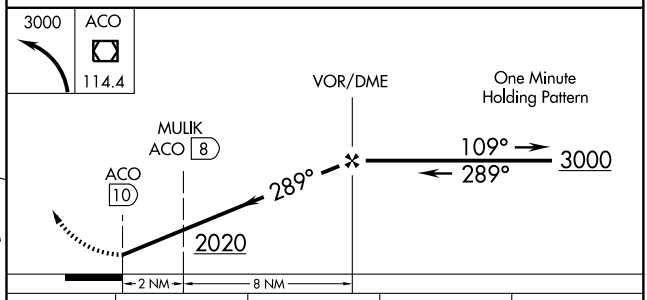
AKRON-CANTON APP CON ★	CLNC DEL	UNICOM	
118.6 371.875	125.65	122.725 (CTAF)	122.9 L





MIRL Rwy 1-19 L
REIL Rwys 1 and 19 L

FAF to MAP 10 NM					
Knots	60	90	120	150	180
Min:Sec	10:00	6:40	5:00	4:00	3:20



CATEGORY	A	B	C	D
CIRCLING	2020-1¼	886 (900-1¼)	2020-2¾ 886 (900-2¾)	NA
MULIK FIX MINIMUMS				
CIRCLING	1760-1	626 (700-1)	1760-1¾ 626 (700-1¾)	NA

EC-2, 14 JAN 2010 to 11 FEB 2010

KENTON, OHIO

AL-6473 (FAA)

VORTAC FDY 108.2 Chan 19	APP CRS 222°	Rwy ldg 4201 TDZE 1030 Apt Elev 1030

VOR/DME RNAV or GPS RWY 22

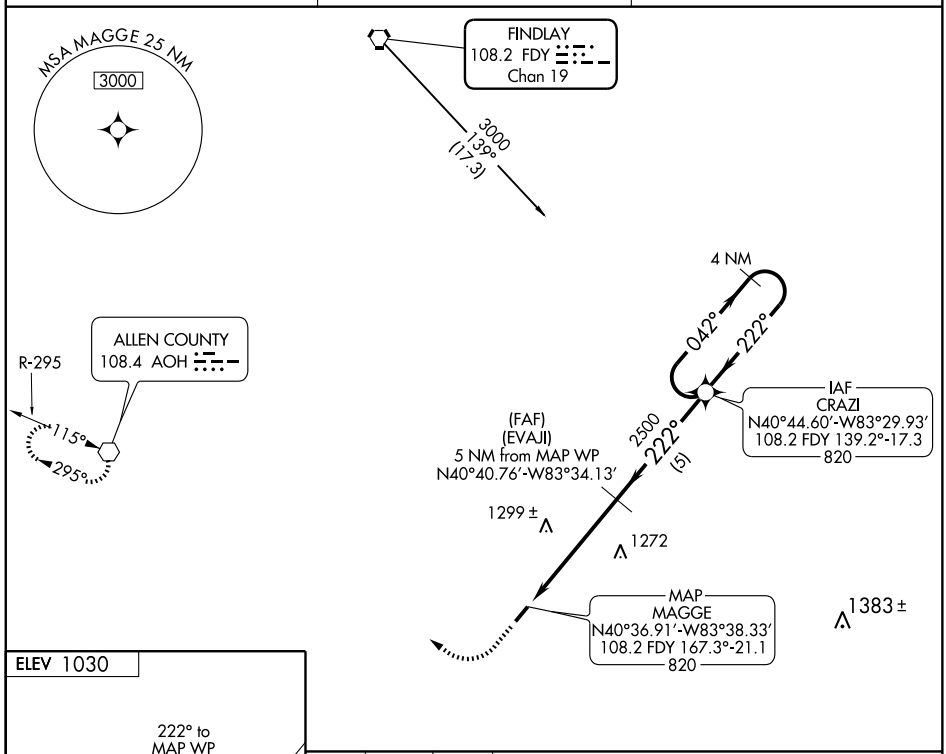
KENTON/HARDIN COUNTY (I95)

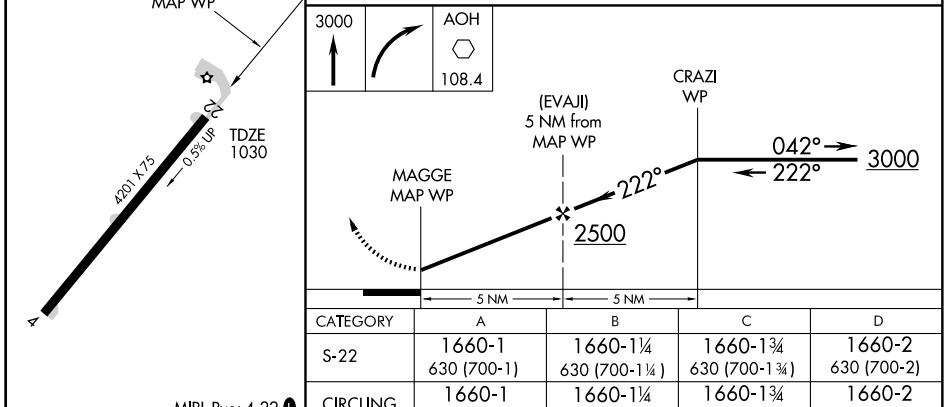
NA

Use Findlay altimeter setting.

MISSED APPROACH: Climb to 3000 then right turn direct AOH VOR and hold.

FINDLAY ASOS	INDIANAPOLIS CENTER	UNICOM
124.425	128.075 269.0	122.8 (CTAF) L





CATEGORY	A	B	C	D
S-22	1660-1 630 (700-1)	1660-1¼ 630 (700-1¼)	1660-1¾ 630 (700-1¾)	1660-2 630 (700-2)
CIRCLING	1660-1 630 (700-1)	1660-1¼ 630 (700-1¼)	1660-1¾ 630 (700-1¾)	1660-2 630 (700-2)

EC-2, 14 JAN 2010 to 11 FEB 2010

VOR AOH	APP CRS	Rwy ldg	N/A
108.4	115°	TDZE	N/A
		Apt Elev	1030

VOR or GPS-A

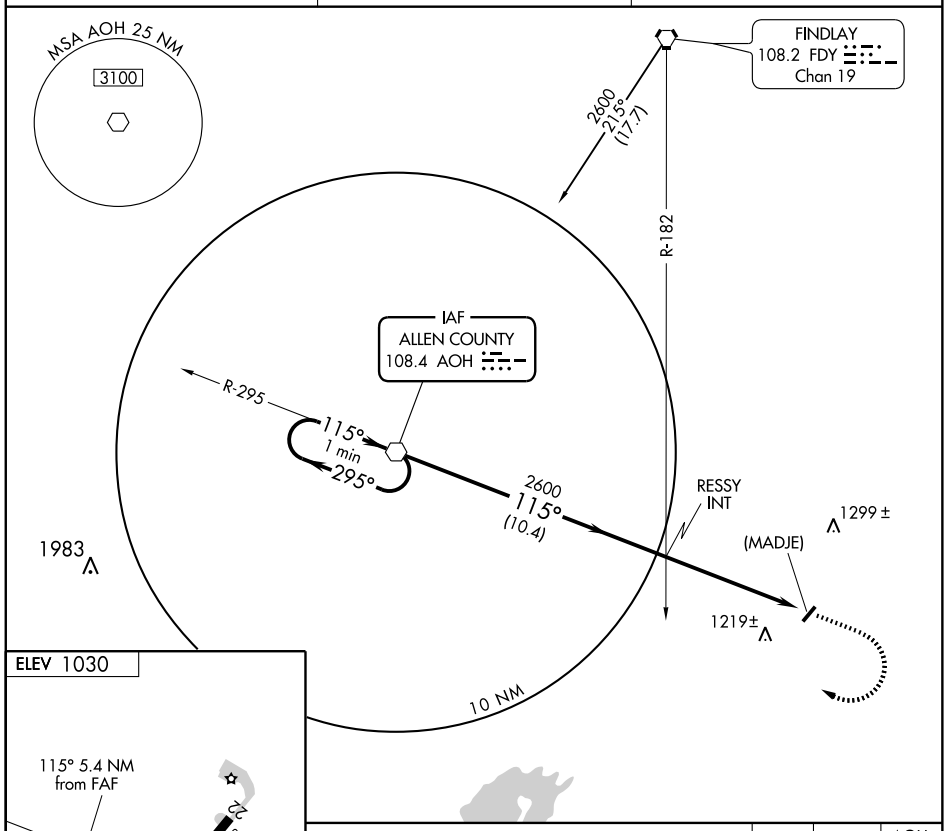
KENTON/HARDIN COUNTY (I95)

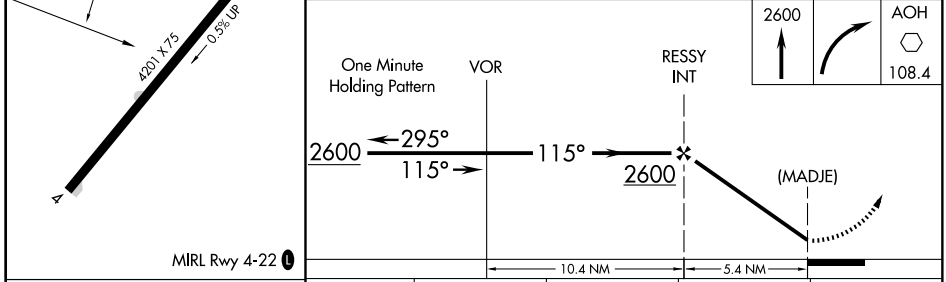
Use Findlay altimeter setting.

NA

MISSED APPROACH: Climb to 2600 then right turn direct AOH VOR and hold.

FINDLAY ASOS	INDIANAPOLIS CENTER	UNICOM
124.425	128.075 269.0	122.8 (CTAF)



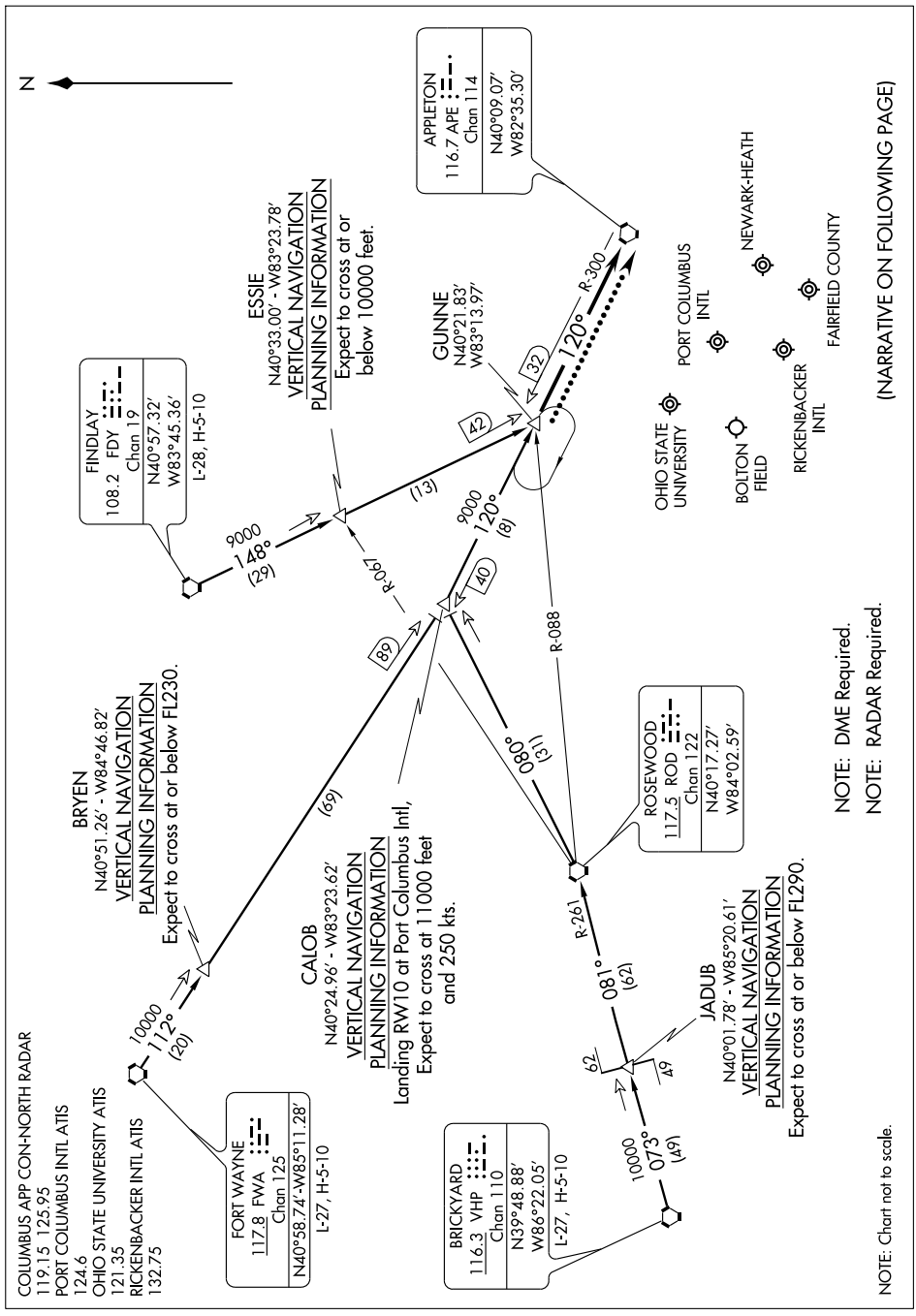


FAF to MAP 5.4 NM					
Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48

CATEGORY	A	B	C	D
CIRCLING	1620-1 590 (600-1)	1640-1 610 (700-1)	1640-1¾ 610 (700-1¾)	1640-2 610 (700-2)

GUNNE ONE ARRIVAL

COLUMBUS, OHIO



GUNNE ONE ARRIVAL

ARRIVAL ROUTE DESCRIPTION

BRICKYARD TRANSITION (VHP.GUNNE1): From over VHP VORTAC via VHP R-073 to JADUB INT, then via ROD R-261 to ROD VORTAC, then via ROD R-080 to CALOB INT, then via APE R-300 to GUNNE INT. Thence. . . .

FINDLEY TRANSITION (FDY.GUNNE1): From over FDY VORTAC via FDY R-148 to GUNNE INT. Thence. . . .

FORT WAYNE TRANSITION (FWA.GUNNE1): From over FWA VORTAC via FWA R-112 to CALOB INT, then via APE R-300 to GUNNE INT. Thence. . . .

. . . .From over GUNNE via heading 120°. Expect radar vectors to final approach course.

LOST COMMUNICATION PROCEDURE:

For all airports - From over GUNNE INT direct APE VORTAC, maintain 4000 and hold.

LOC I-LHQ	APP CRS	Rwy ldg	4725
111.9	280°	TDZE	864
		Apt Elev	869

LOC RWY 28

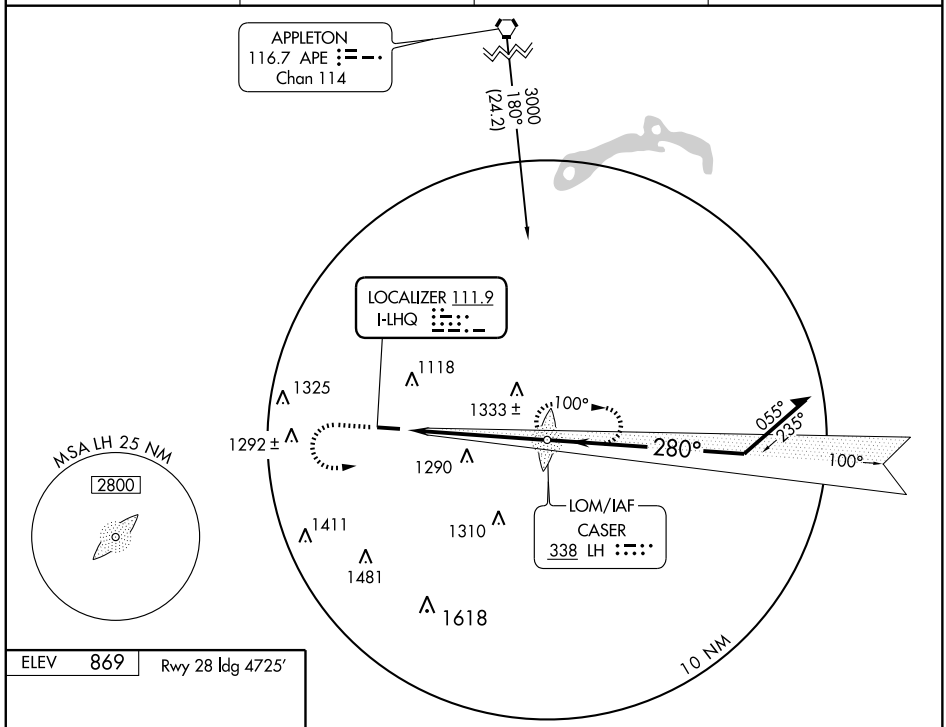
LANCASTER/FAIRFIELD COUNTY (LHQ)

T

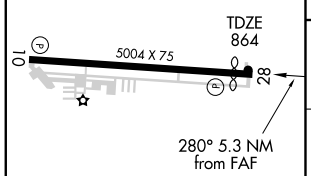
NA

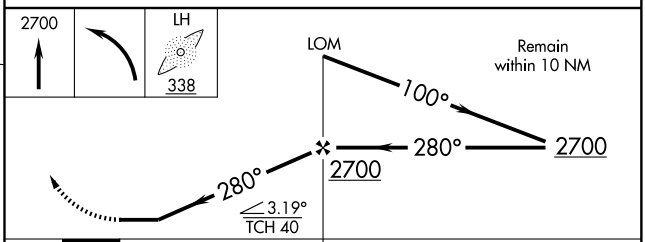
MISSED APPROACH: Climb to 2700 then left turn direct CASER LOM and hold.

ASOS	COLUMBUS APP CON	CLNC DEL	UNICOM
118.375	132.3 279.6	121.65	122.725 (CTAF) L



ADF or RADAR REQUIRED





REIL Rwys 10 and 28 L
MIRL Rwy 10-28 L

FAF to MAP 5.3 NM

Knots	60	90	120	150	180
Min:Sec	5:18	3:32	2:39	2:07	1:46

CATEGORY	A	B	C	D
S-28	1520-1 656 (700-1)		1520-1¾ 656 (700-1¾)	NA
CIRCLING	1520-1 651 (700-1)	1540-1 671 (700-1)	1640-2¼ 771 (800-2¼)	NA

EC-2, 14 JAN 2010 to 11 FEB 2010

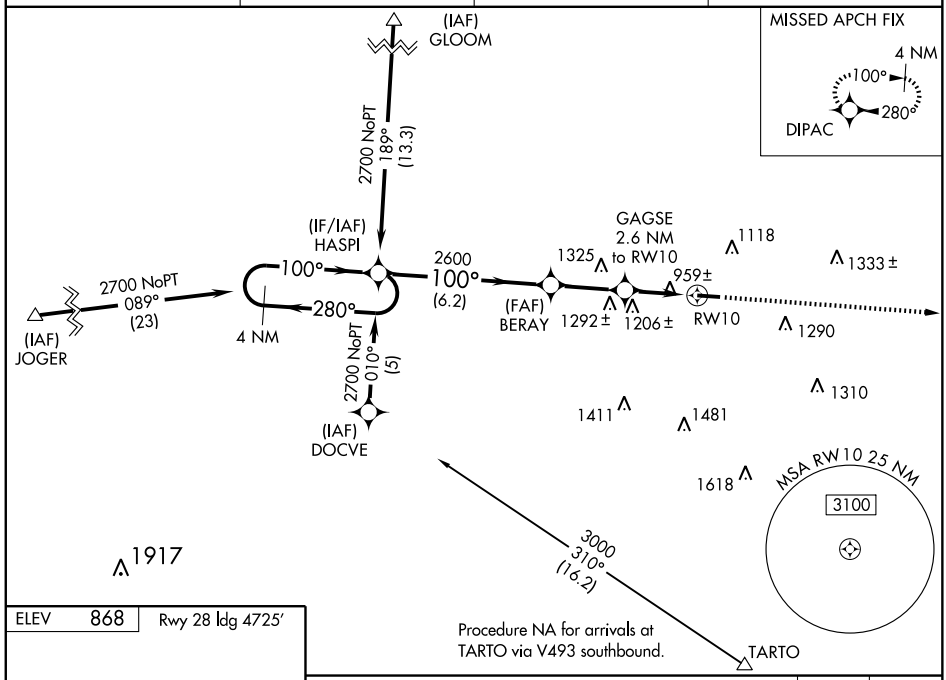
WAAS CH 97701 W10A	APP CRS 100°	Rwy ldg 5004 TDZE 857 Apt Elev 868

RNAV (GPS) RWY 10
LANCASTER/FAIRFIELD COUNTY (LHQ)

Baro-VNAV NA when using Rickenbacker Intl altimeter setting. DME/DME RNP-0.3 NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). Visibility reduction by helicopters NA. When local altimeter setting not received, use Rickenbacker Intl altimeter setting and increase all DAs 48 feet, and all MDAs 60 feet, and increase LPV, LNAV/VNAV all Cats and Circling Cat C visibility ¼ mile.

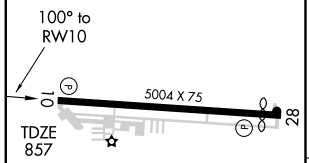
MISSED APPROACH: Climb to 2800 direct DIPAC and hold.

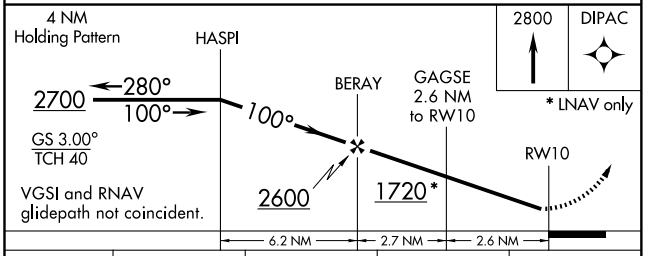
ASOS	COLUMBUS APP CON	CLNC DEL	UNICOM
118.375	132.3 279.6	121.65	122.725 (CTAF) L



Procedure NA for arrivals at TARTO via V493 southbound.

ELEV 868 Rwy 28 ldg 4725'





CATEGORY	A	B	C	D
LPV DA	1170-1 313 (400-1)			NA
LNAV/VNAV DA	1291-1½ 434 (500-1½)			NA
LNAV MDA	1460-1 603 (600-1)		1460-1¾ 603 (600-1¾)	NA
CIRCLING	1520-1 652 (700-1)	1540-1 672 (700-1)	1560-2 692 (700-2)	NA

REIL Rwys 10 and 28 L
MIRL Rwy 10-28 L

EC-2. 14 JAN 2010 to 11 FEB 2010

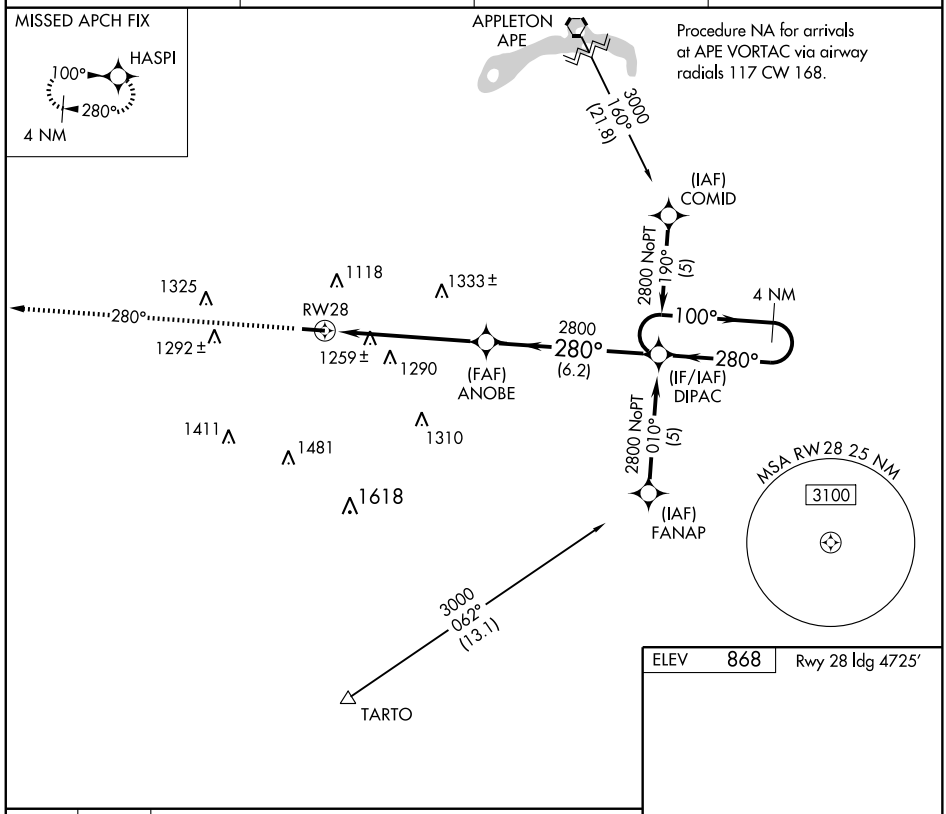
APP CRS	Rwy ldg	4725
280°	TDZE	864
	Apt Elev	868

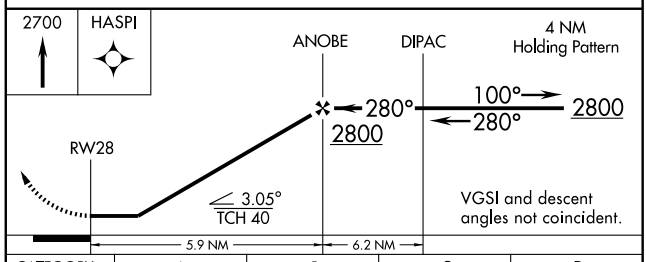
RNAV (GPS) RWY 28
LANCASTER/FAIRFIELD COUNTY (LHQ)

DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Rickenbacker Intl altimeter setting and increase all MDAs 60 feet, and LNAV/Circling visibility Cat C ¼ mile.

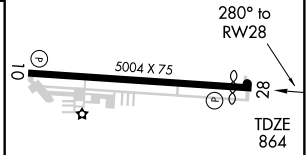
MISSED APPROACH: Climb to 2700 direct HASPI and hold.

ASOS	COLUMBUS APP CON	CLNC DEL	UNICOM
118.375	132.3 279.6	121.65	122.725 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	1520-1 656 (700-1)		1520-1¾ 656 (700-1¾)	NA
CIRCLING	1520-1 652 (700-1)	1540-1 672 (700-1)	1560-2 692 (700-2)	NA



REIL Rwys 10 and 28 L
MIRL Rwy 10-28 L

EC-2, 14 JAN 2010 to 11 FEB 2010

VORTAC APE	APP CRS	Rwy ldg	N/A
116.7	194°	TDZE	N/A
Chan 114		Apt Elev	869

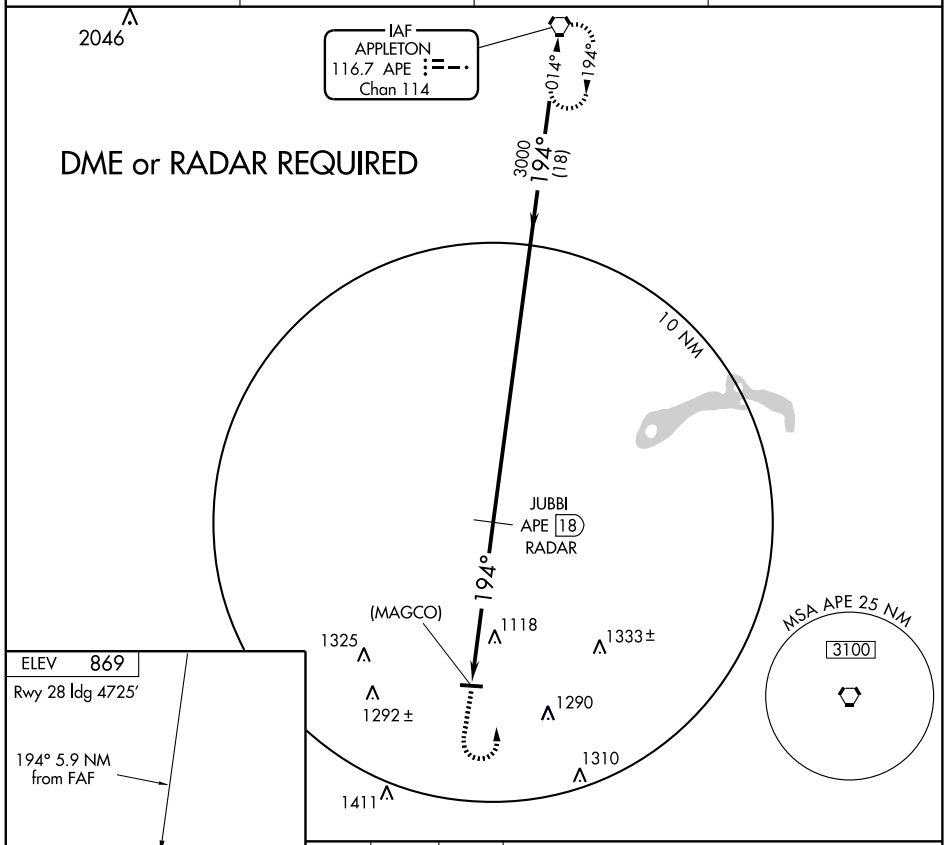
VOR or GPS-A

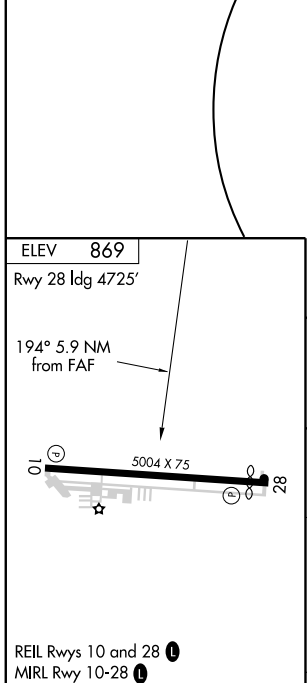
LANCASTER/FAIRFIELD COUNTY (LHQ)

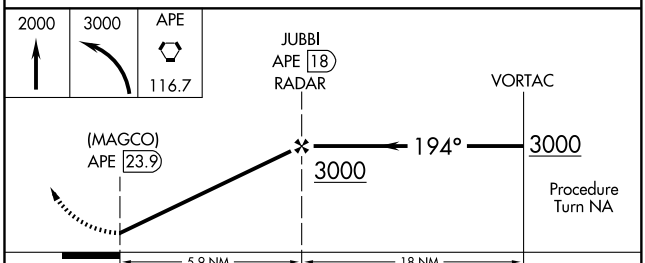
NA

MISSED APPROACH: Climb to 2000, then climbing left turn to 3000 direct APE VORTAC and hold.

ASOS	COLUMBUS APP CON	CLNC DEL	UNICOM
118.375	132.3 279.6	121.65	122.725 (CTAF) L







FAF to MAP 5.9 NM					
Knots	60	90	120	150	180
Min:Sec	5:54	3:56	2:57	2:22	1:58

CATEGORY	A	B	C	D
CIRCLING	1580-1 711 (800-1)	1580-1¼ 771 (800-1¼)	1640-2¼ 771 (800-2¼)	NA

EC-2. 14 JAN 2010 to 11 FEB 2010

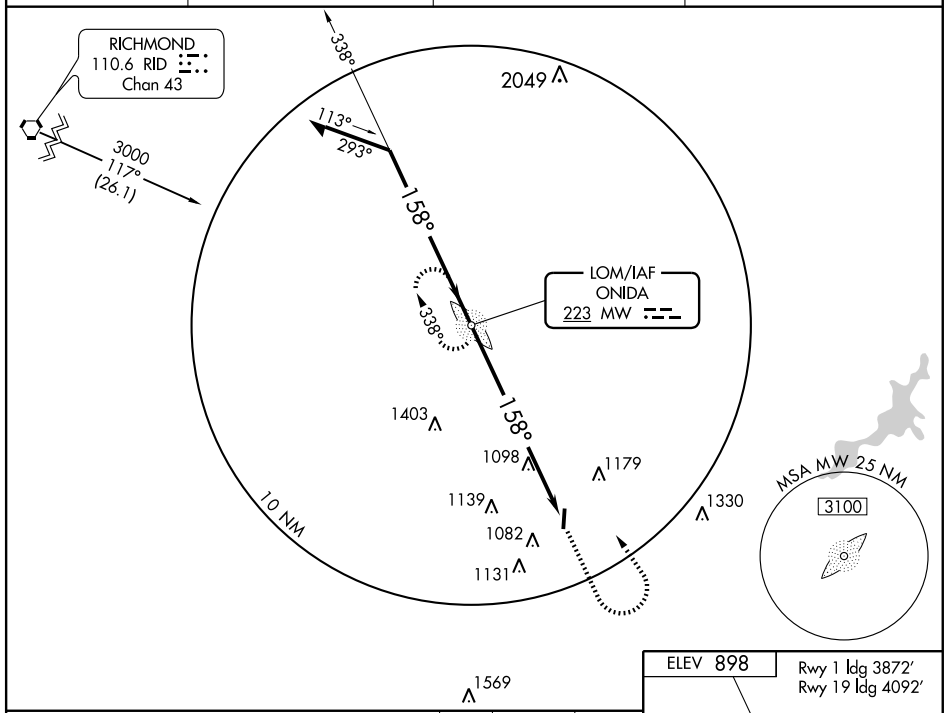
LOM MW	APP CRS	Rwy ldg	N/A
223	158°	TDZE	N/A
		Apt Elev	898

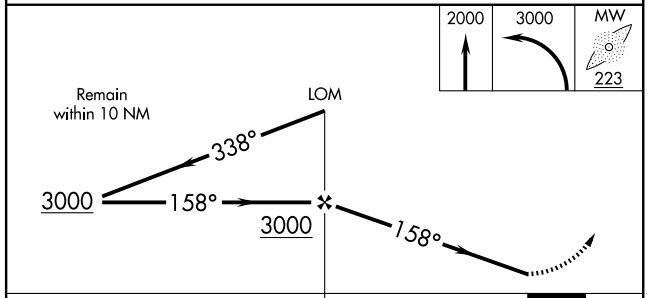
NDB-A
LEBANON-WARREN COUNTY (I68)

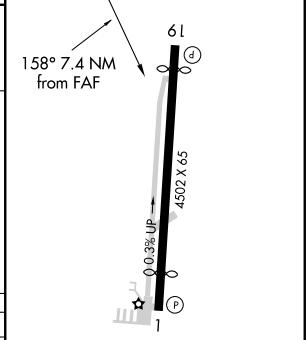
NA — Obtain local altimeter setting on CTAF; when not received, use Dayton-Wright Brothers altimeter setting.

MISSED APPROACH: Climb to 2000 then climbing left turn to 3000 direct MW LOM and hold.

AWOS-3	DAYTON APP CON	DAYTON CLNC DEL	UNICOM
120.55	118.85 127.225 327.1	119.4	123.075 (CTAF) L







MIRL Rwy 1-19 L
REIL Rwys 1 and 19

CATEGORY	A	B	C	D
CIRCLING	1560-1 662 (700-1)		1560-1¾ 662 (700-1¾)	1560-2 662 (700-2)
DAYTON-WRIGHT BROTHERS ALTIMETER SETTING MINIMUMS				
CIRCLING	1580-1 682 (700-1)		1580-2 682 (700-2)	1580-2¼ 682 (700-2¼)

FAF to MAP 7.4 NM

Knots	60	90	120	150	180
Min:Sec	7:24	4:56	3:42	2:58	2:28

EC-2, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	3872
009°	TDZE	889
	Apt Elev	898

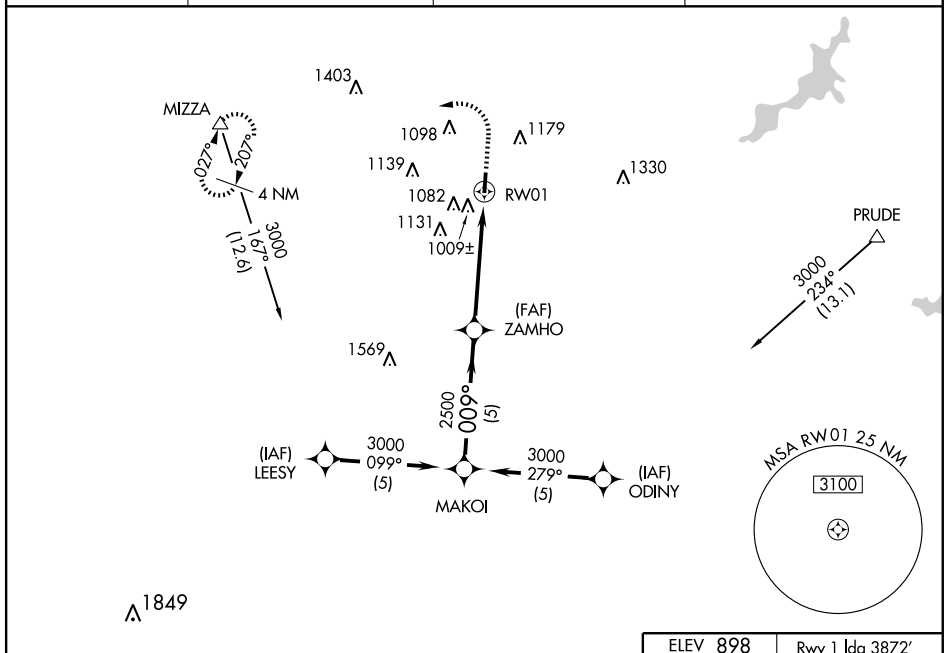
RNAV (GPS) RWY 1
LEBANON-WARREN COUNTY (I68)

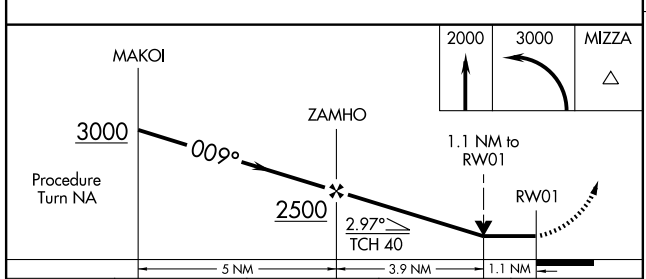
NA

Obtain local altimeter setting on CTAF; when not received use Dayton-Wright Brothers altimeter setting.
VDP NA with Dayton-Wright Brothers altimeter setting.
GPS or RNP-0.3 Required. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2000 then climbing left turn to 3000 direct MIZZA WP and hold.

AWOS-3	DAYTON APP CON	DAYTON CLNC DEL	UNICOM
120.55	118.85 127.225 327.1	119.4	123.075 (CTAF) L

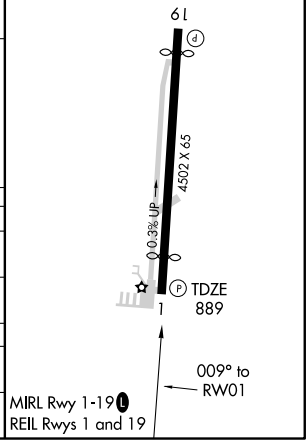




CATEGORY	A	B	C	D
LNAV MDA	1260-1 371 (400-1)			1260-1¼ 371 (400-1¼)
CIRCLING	1380-1 482 (500-1)	1400-1 502 (600-1)	1480-1½ 582 (600-1½)	1480-2 582 (600-2)
DAYTON-WRIGHT BROTHERS ALTIMETER SETTING MINIMUMS				
LNAV MDA	1300-1 411 (500-1)		1300-1¼ 411 (500-1¼)	
CIRCLING	1420-1 522 (600-1)		1520-1¾ 622 (700-1¾)	1520-2 622 (700-2)

ELEV 898

Rwy 1 ldg 3872′
Rwy 19 ldg 4092′



MIRL Rwy 1-19 L
REIL Rwys 1 and 19

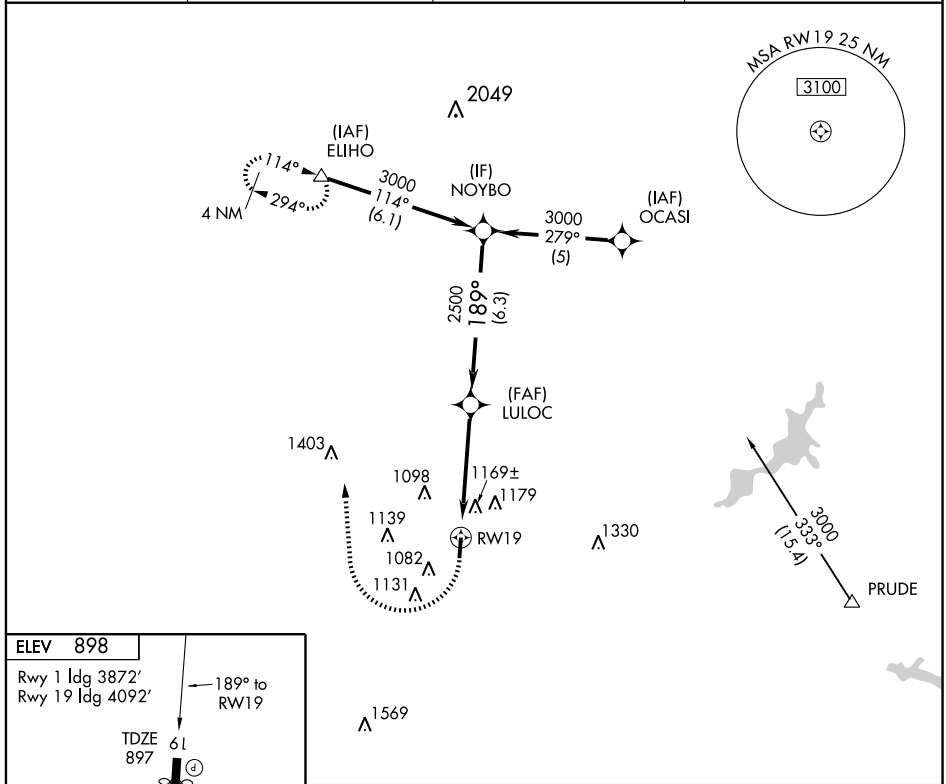
APP CRS	Rwy ldg	4092
189°	TDZE	897
	Apt Elev	898

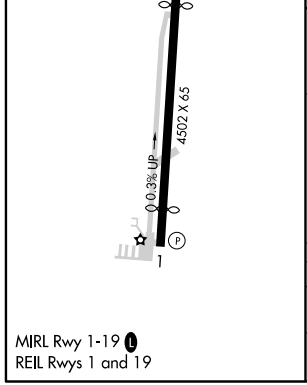
RNAV (GPS) RWY 19
LEBANON-WARREN COUNTY (I68)

NA When local altimeter not received, use Dayton-Wright Brothers altimeter setting and increase all MDAs 40 feet. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.

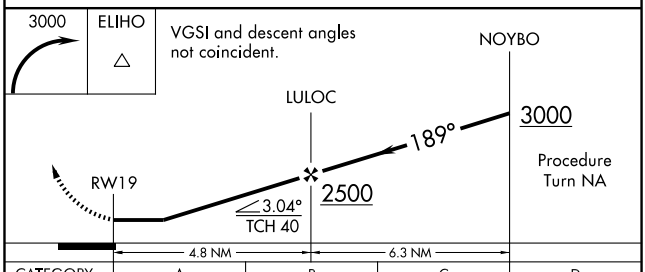
MISSED APPROACH: Climbing right turn to 3000 direct ELIHO and hold.

AWOS-3	DAYTON APP CON	DAYTON CLNC DEL	UNICOM
120.55	118.85 127.225 327.1	119.4	123.075 (CTAF) L





MIRL Rwy 1-19 L
REIL Rwys 1 and 19



CATEGORY	A	B	C	D
LNAV MDA	1420-1 523 (600-1)		1420-1½ 523 (600-1½)	1420-1¾ 523 (600-1¾)
CIRCLING	1480-1 582 (600-1)		1480-1½ 582 (600-1½)	1480-2 582 (600-2)

EC-2, 14 JAN 2010 to 11 FEB 2010

LOC I-AOH	APP CRS	Rwy ldg	5149
109.3	274°	TDZE	975
		Apt Elev	975

ILS or LOC RWY 27
LIMA ALLEN COUNTY (AOH)

NA Visibility reduction by helicopters NA. When local altimeter setting not received, use Findlay altimeter setting and increase all DA/MDA 80 feet, increase S-ILS 27 all Cats visibility ¼ mile and increase S-LOC 27 Cat D visibility ¼ mile.

MISSED APPROACH: Climb to 3000, then left turn direct AOH VOR and hold.

ASOS	INDIANAPOLIS CENTER	UNICOM
108.4	128.075 269.0	122.7 (CTAF) L

REIL Rwy 27 L
HIRL Rwy 9-27 L

FAF to MAP 3.7 NM					
Knots	60	90	120	150	180
Min:Sec	3:42	2:28	1:51	1:29	1:14

CATEGORY	A	B	C	D
S-ILS 27	1225-1 250 (300-1)			
S-LOC 27	1380-1 405 (500-1)		1380-1¼ 405 (500-1¼)	
CIRCLING	1420-1 445 (500-1)	1440-1 465 (500-1)	1440-1½ 465 (500-1½)	1540-2 565 (600-2)

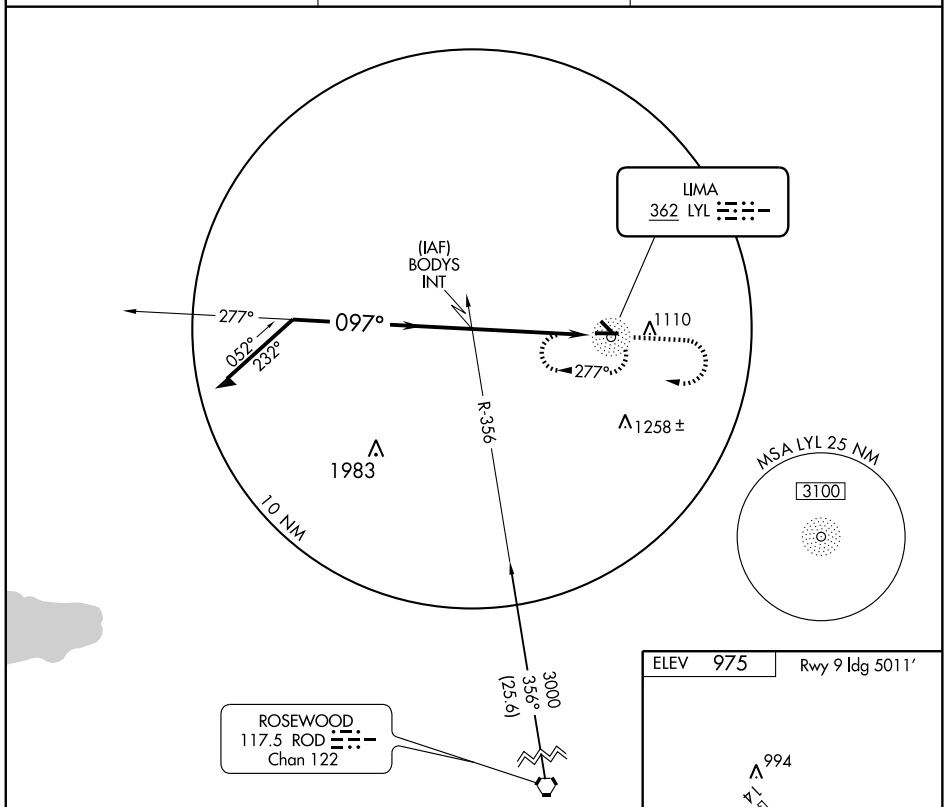
NDB LYL 362	APP CRS 097°	Rwy ldg 5011 TDZE 963 Apt Elev 975

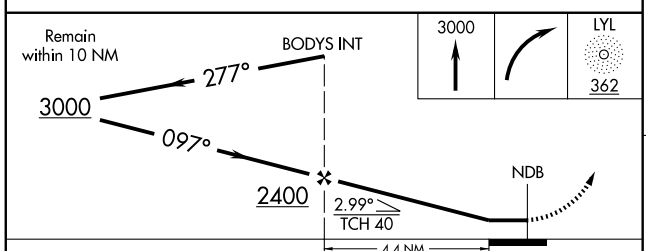
NDB or GPS RWY 9
LIMA ALLEN COUNTY (AOH)

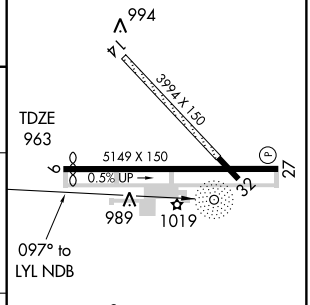
NA

MISSED APPROACH: Climb to 3000, then right turn direct LYL NDB and hold.

ASOS	INDIANAPOLIS CENTER	UNICOM
108.4	128.075 269.0	122.7 (CTAF) L







REIL Rwy 27 L
HIRL Rwy 9-27 L

CATEGORY	A	B	C	D
S-9	1540-1 577 (600-1)		1540-1½ 577 (600-1½)	1540-1¾ 577 (600-1¾)
CIRCLING	1540-1 565 (600-1)		1540-1½ 565 (600-1½)	1540-2 565 (600-2)

Knots	60	90	120	150	180
Min:Sec					

EC-2. 14 JAN 2010 to 11 FEB 2010

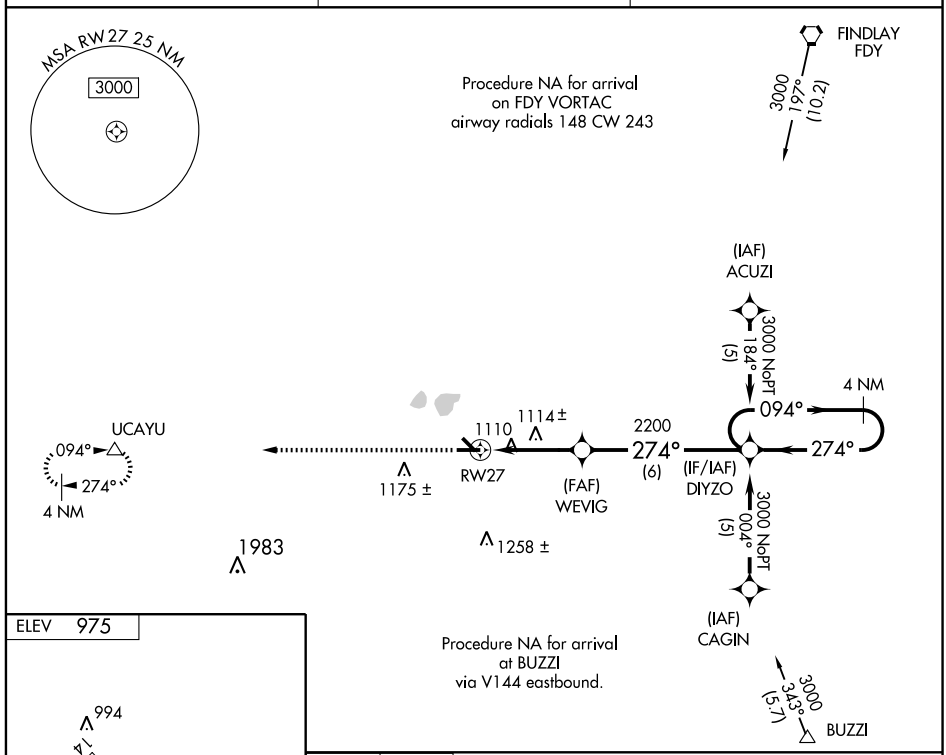
WAAS Ch 50511 W27A	APP CRS 274°	Rwy ldg 5149 TDZE 975 Apt Elev 975

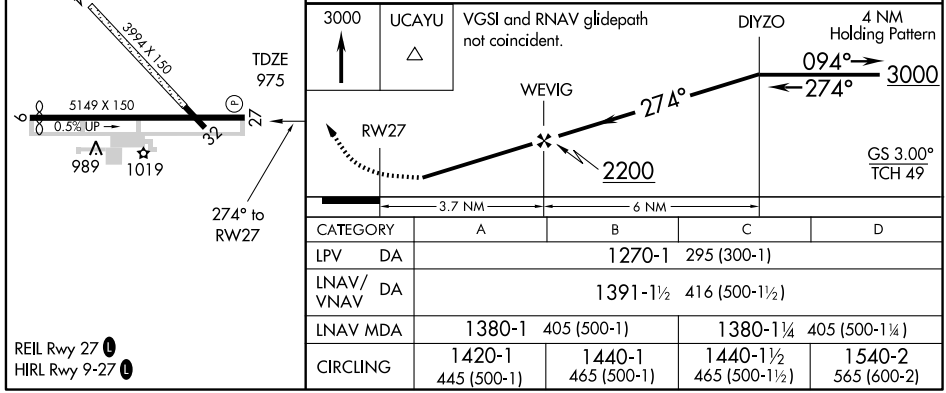
RNAV (GPS) RWY 27
LIMA ALLEN COUNTY (AOH)

Baro-VNAV NA when using Findlay altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Findlay altimeter setting and increase all DA/MDA 80 feet, increase LPV and LNAV/VNAV all Cats visibilities ¼ mile, and increase LNAV Cat D visibility ¼ mile.

MISSED APPROACH: Climb to 3000 direct UCAYU and hold. When authorized by ATC, climb-in-hold to 6000.

ASOS	INDIANAPOLIS CENTER	UNICOM
108.4	128.075 269.0	122.7 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1270-1 295 (300-1)			
LNAV/VNAV DA	1391-1½ 416 (500-1½)			
LNAV MDA	1380-1 405 (500-1)		1380-1¼ 405 (500-1¼)	
CIRCLING	1420-1 445 (500-1)	1440-1 465 (500-1)	1440-1½ 465 (500-1½)	1540-2 565 (600-2)

REIL Rwy 27 L
HIRL Rwy 9-27 L

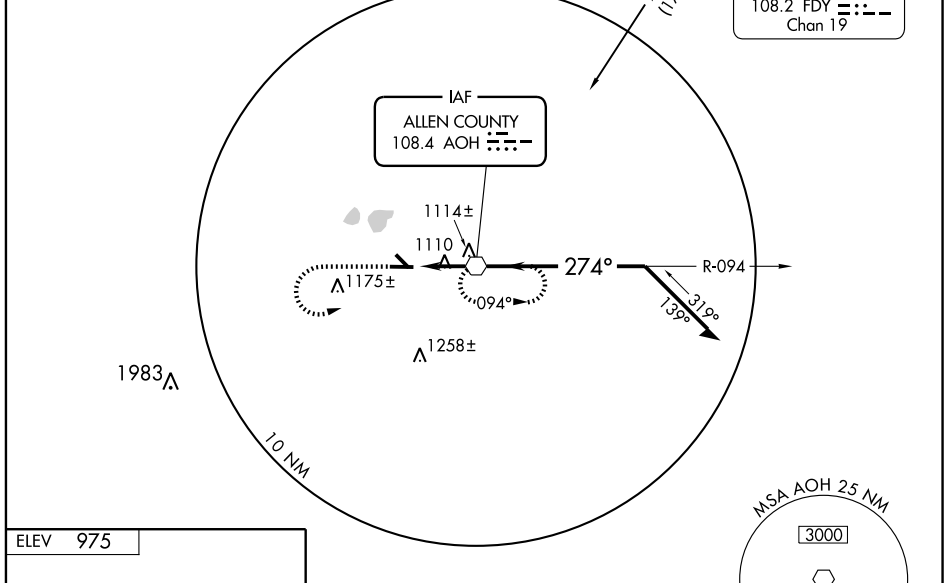
VOR AOH 108.4	APP CRS 274°	Rwy ldg 5149 TDZE 975 Apt Elev 975

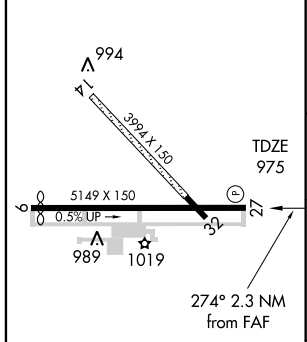
VOR RWY 27
LIMA ALLEN COUNTY (AOH)

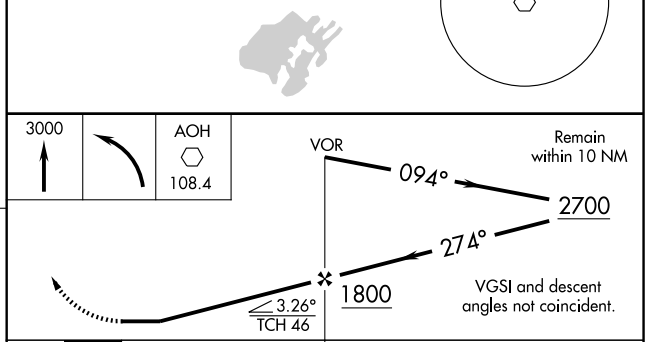
Visibility reduction by helicopters NA. When local altimeter setting not received, use Findlay altimeter setting and increase all MDA 80 feet and S-27 Cat D visibility ¼ mile.

MISSED APPROACH: Climb to 3000 then left turn direct AOH VOR and hold.

ASOS	INDIANAPOLIS CENTER	UNICOM
108.4	128.075 269.0	122.7 (CTAF) L







REIL Rwy 27 L
HIRL Rwy 9-27 L

FAF to MAP 2.3 NM					
Knots	60	90	120	150	180
Min:Sec	2:18	1:32	1:09	0:55	0:46

CATEGORY	A	B	C	D
S-27	1380-1 405 (500-1)		1380-1¼ 405 (500-1¼)	
CIRCLING	1420-1 445 (500-1)	1440-1 465 (500-1)	1440-1½ 465 (500-1½)	1540-2 565 (600-2)

EC-2, 14 JAN 2010 to 11 FEB 2010

NDB UYF	APP CRS	Rwy ldg	4001
263	091°	TDZE	1082
		Apt Elev	1082

NDB RWY 9

LONDON/MADISON COUNTY (UYF)

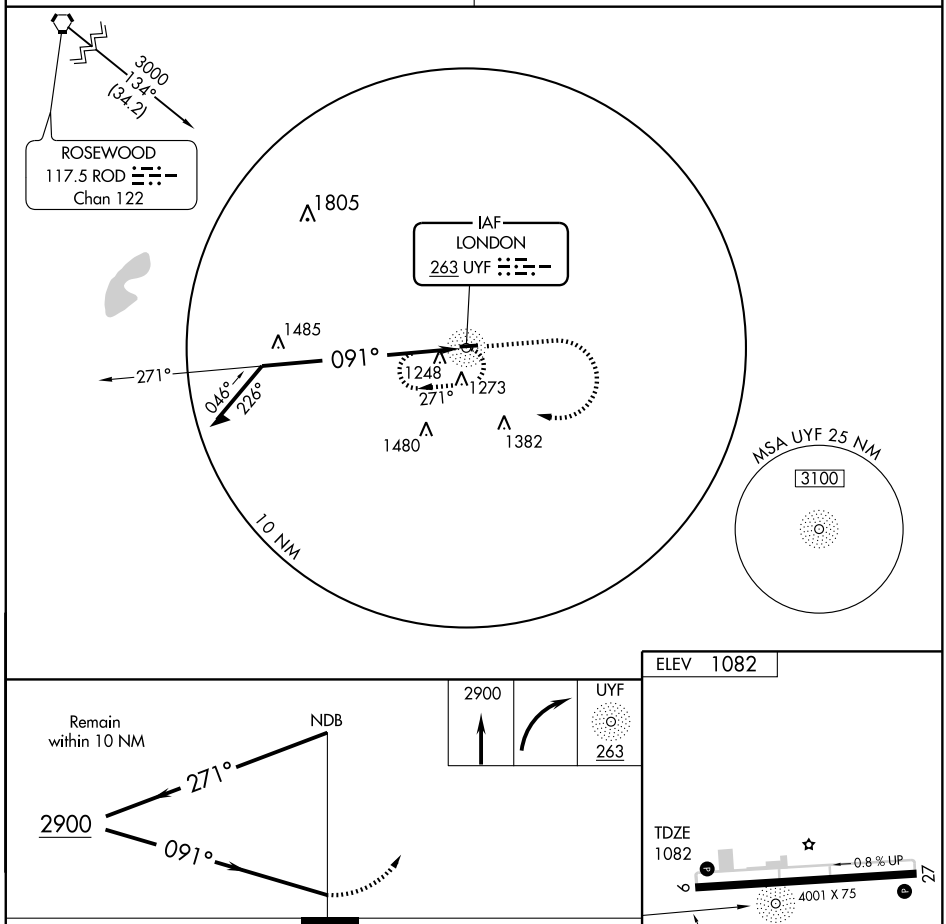
Obtain local altimeter setting on CTAF; when not received, use Springfield altimeter setting. Visibility reduction by helicopters NA.

NA

MISSED APPROACH: Climb to 2900 then right turn direct UYF NDB and hold.

DAYTON APP CON
118.85 127.225 327.1

UNICOM
123.0 (CTAF) L



CATEGORY	A	B	C	D
S-9	1900-1 818 (900-1)	1900-1¼ 818 (900-1¼)	1900-2½ 818 (900-2½)	1900-2¾ 818 (900-2¾)
CIRCLING	1900-1 818 (900-1)	1900-1¼ 818 (900-1¼)	1900-2½ 818 (900-2½)	1900-2¾ 818 (900-2¾)
SPRINGFIELD ALTIMETER SETTING MINIMUMS				
S-9	1940-1 858 (900-1)	1940-1¼ 858 (900-1¼)	1940-2½ 858 (900-2½)	1940-2¾ 858 (900-2¾)
CIRCLING	1940-1 858 (900-1)	1940-1¼ 858 (900-1¼)	1940-2½ 858 (900-2½)	1940-2¾ 858 (900-2¾)

REIL Rwys 9 and 27 L
MIRL Rwy 9-27 L

EC-2. 14 JAN 2010 to 11 FEB 2010

WAAS CH 53409 W09A	APP CRS 093°	Rwy ldg 4001 TDZE 1082 Apt Elev 1082

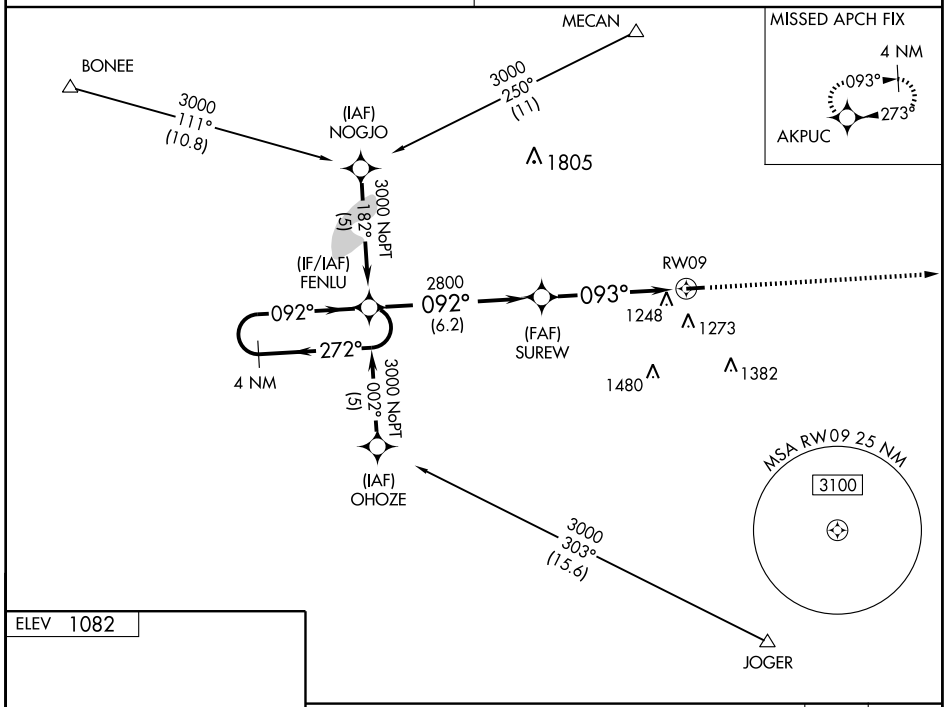
RNAV (GPS) RWY 9

LONDON/MADISON COUNTY (UYF)

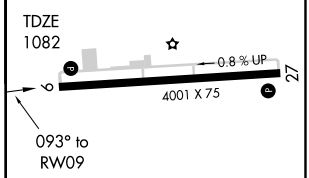
Baro-VNAV NA when using Springfield altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F).
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Obtain local altimeter setting on CTAF; when not received, use Springfield altimeter setting and increase all DA 47 feet and all MDA 60 feet and LNAV Cat C/D and Circling Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 3000 direct AKPUC and hold.

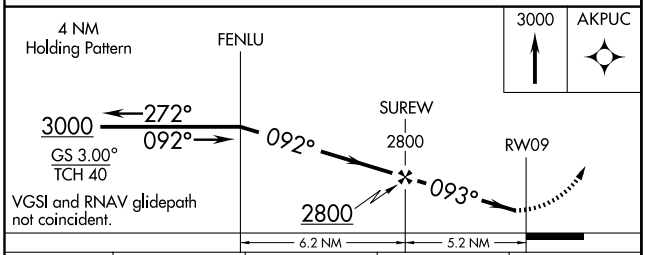
DAYTON APP CON	UNICOM
118.85 127.225 327.1	123.0 (CTAF) L



ELEV 1082



REIL Rwys 9 and 27 L
MIRL Rwy 9-27 L



CATEGORY	A	B	C	D
LPV DA	1332-1 250 (300-1)			
LNAV/VNAV DA	1548-1¾ 466 (500-1¾)			
LNAV MDA	1580-1 498 (500-1)		1580-1¼ 498 (500-1¼)	1580-1½ 498 (500-1½)
CIRCLING	1600-1 518 (600-1)	1640-1 558 (600-1)	1640-1½ 558 (600-1½)	1640-2 558 (600-2)

WAAS CH **61009** **W27A**	APP CRS **273°**	Rwy ldg **4001** TDZE **1073** Apt Elev **1082**

RNAV (GPS) RWY 27

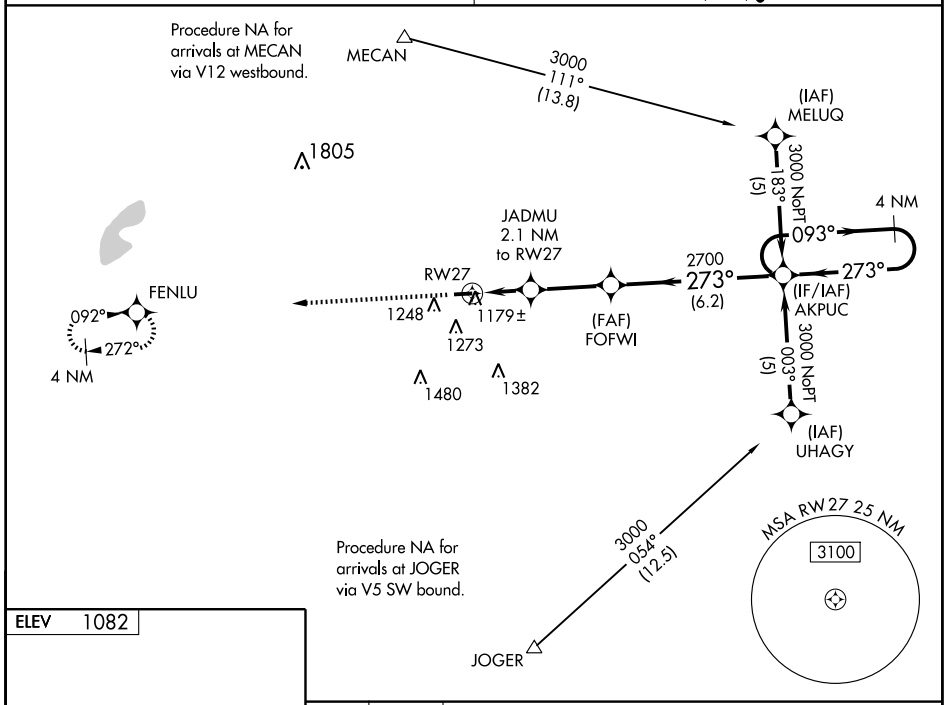
LONDON/ MADISON COUNTY (UYF)

Baro-VNAV and VDP NA when using Springfield altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Obtain local altimeter setting on CTAF; when not received, use Springfield altimeter setting and increase all DA 47 feet and all MDA 60 feet and LPV visibility ¼ mile all Cats, LNAV Cat C/D ¼ mile, and Circling Cat C ¼ mile.

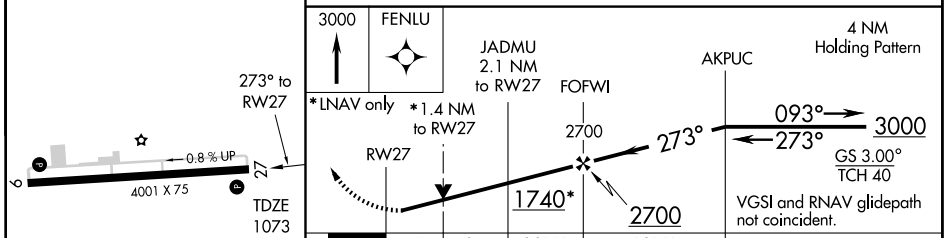
NA

MISSED APPROACH: Climb to 3000 direct FENLU and hold.

DAYTON APP CON	UNICOM
118.85 127.225 327.1	**123.0** (CTAF) L



ELEV 1082



CATEGORY	A	B	C	D
LPV DA	1400-1¼ 327 (400-1¼)			
LNAV/ VNAV DA	1449-1½ 376 (400-1½)			
LNAV MDA	1540-1 467 (500-1)		1540-1¼ 467 (500-1¼)	1540-1½ 467 (500-1½)
CIRCLING	1600-1 518 (600-1)	1640-1 558 (600-1)	1640-1½ 558 (600-1½)	1640-2 558 (600-2)

REIL Rwys 9 and 27 L
MIRL Rwy 9-27 L

CLEVELAND DEP CON
126.35 346.32

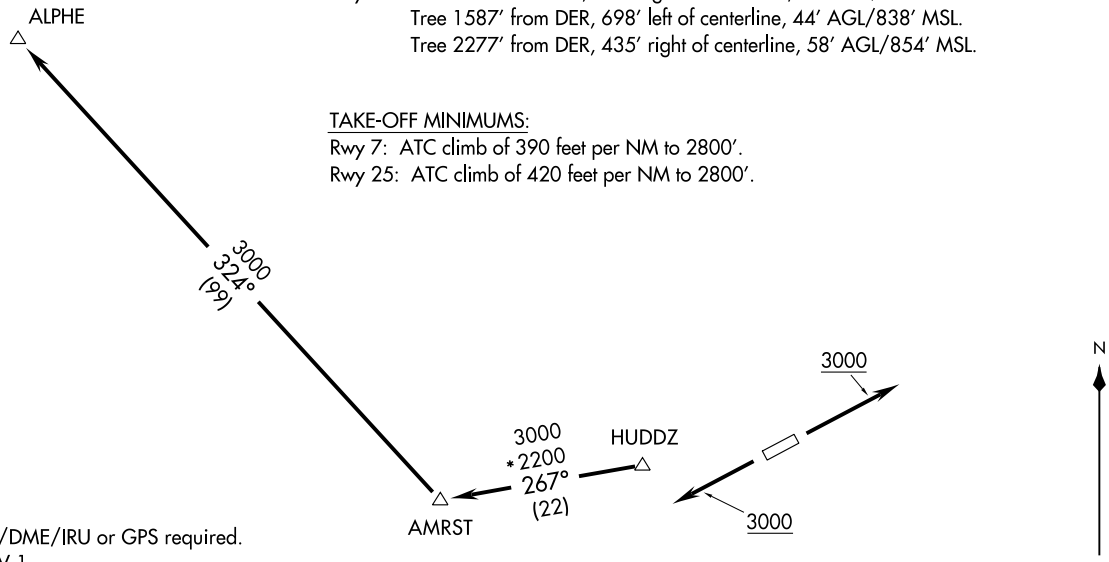
DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 7, 25: Climb via assigned heading to 3000 thence. . . .

. . . . or assigned altitude for radar vectors to HUDDZ, then via 267° track to AMRST, then via 324° track to ALPHE. Expect filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES:
Rwy 7: Multiple Trees beginning 973′ from DER, 293′ right of centerline, up to 75′ AGL/865′ MSL.
Multiple Trees beginning 839′ from DER, 636′ left of centerline, up to 47′ AGL/836′ MSL.
Rwy 25: Bush 583′ from DER, 468′ right of centerline, 10′ AGL/809′ MSL.
Tree 1587′ from DER, 698′ left of centerline, 44′ AGL/838′ MSL.
Tree 2277′ from DER, 435′ right of centerline, 58′ AGL/854′ MSL.

TAKE-OFF MINIMUMS:
Rwy 7: ATC climb of 390 feet per NM to 2800′.
Rwy 25: ATC climb of 420 feet per NM to 2800′.



NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: RADAR REQUIRED.

NOTE: Chart not to scale.

(ALPHE2.ALPHE) 09127

ALPHE TWO DEPARTURE (RNAV)

SL-5703 (FAA)

LORAIN COUNTY RGNL (LPR)
LORAIN/ELYRIA, OHIO

CLEVELAND DEP CON
126.35 346.325

TAKE-OFF MINIMUMS:
Rwys 7, 25: STANDARD.

NOTE: RADAR REQUIRED

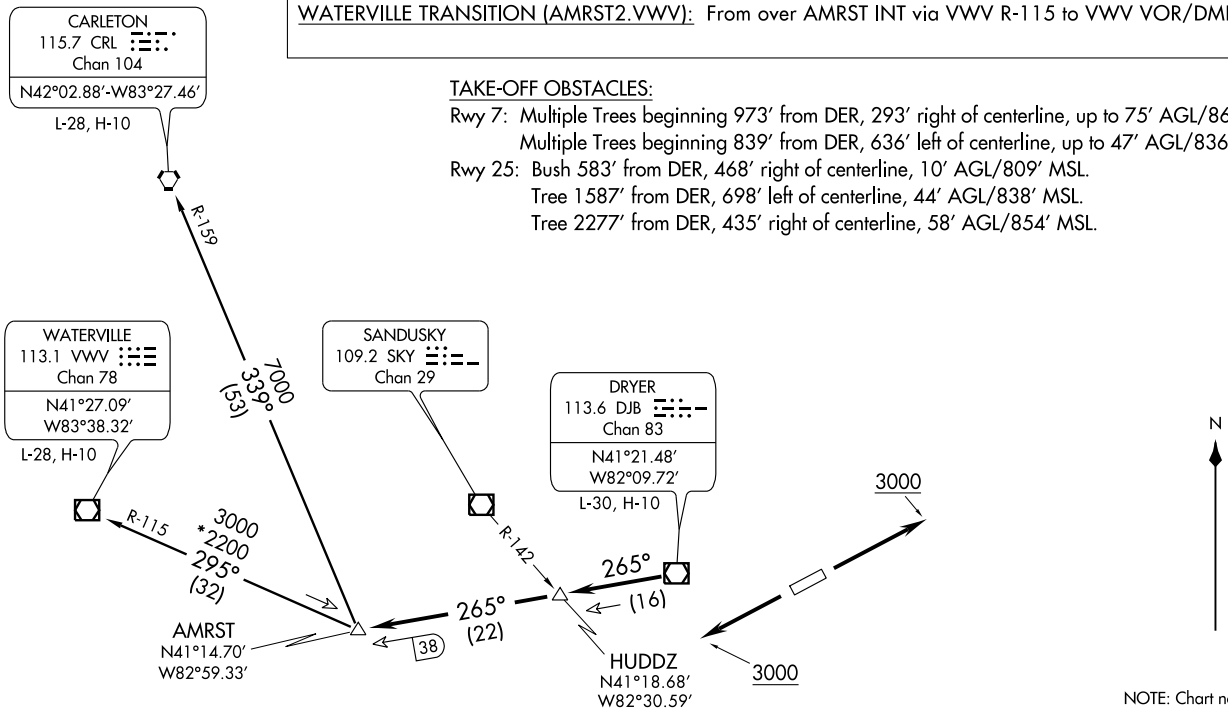
DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 7, 25: Climb via assigned heading to 3000 thence. . . .

. . . . or assigned altitude for vectors to intercept the DJB VOR/DME R-265 to AMRST INT then via (Transition). Expect filed altitude/flight level ten (10) minutes after departure.

CARLETON TRANSITION (AMRST2.CRL): From over AMRST INT via CRL R-159 to CRL VORTAC.
WATERVILLE TRANSITION (AMRST2.VWV): From over AMRST INT via VWV R-115 to VWV VOR/DME.

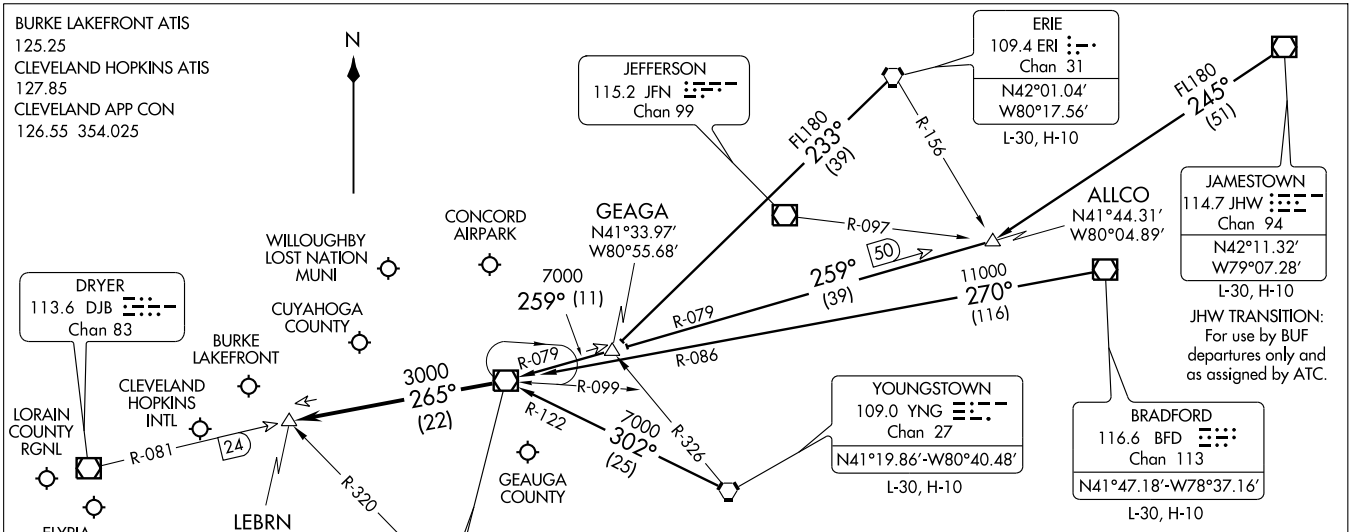
TAKE-OFF OBSTACLES:
Rwy 7: Multiple Trees beginning 973′ from DER, 293′ right of centerline, up to 75′ AGL/865′ MSL.
Multiple Trees beginning 839′ from DER, 636′ left of centerline, up to 47′ AGL/836′ MSL.
Rwy 25: Bush 583′ from DER, 468′ right of centerline, 10′ AGL/809′ MSL.
Tree 1587′ from DER, 698′ left of centerline, 44′ AGL/838′ MSL.
Tree 2277′ from DER, 435′ right of centerline, 58′ AGL/854′ MSL.



NOTE: Chart not to scale.

AMRST TWO DEPARTURE
(AMRST2.AMRST) 09183
SL-5703 (FAA)
LORAIN COUNTY RGNL (LPR)
LORAIN/ELYRIA, OHIO

CHARDON TWO ARRIVAL



VERTICAL NAVIGATION PLANNING INFORMATION

TURBOJETS: Expect clearance to cross at 10,000′ and 250 Kts.
PROPS: Expect clearance to cross at 9000′.

NOTE: RADAR Required.

NOTE: Chart not to scale.

ARRIVAL ROUTE DESCRIPTION

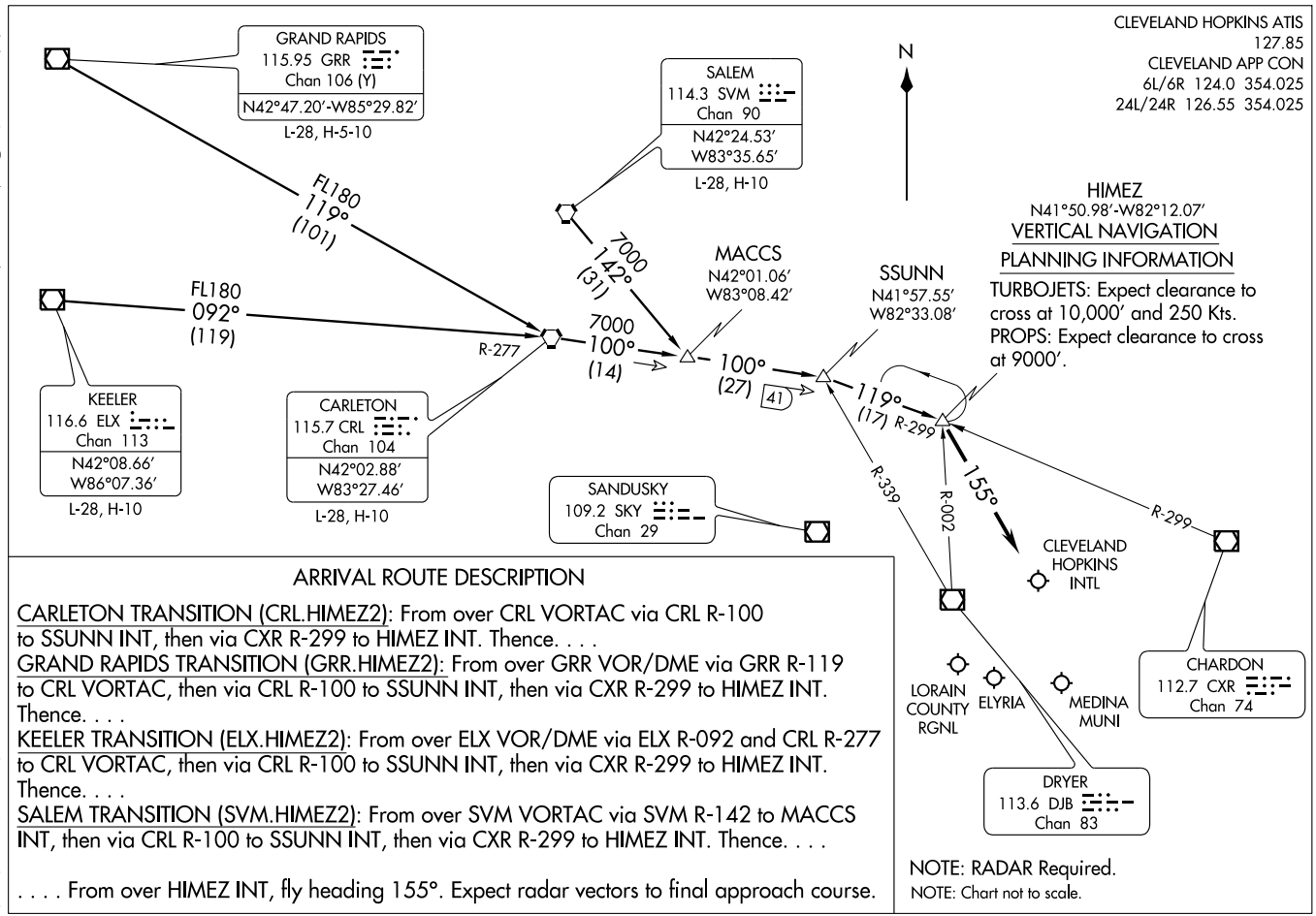
BRADFORD TRANSITION (BFD.CXR2): From over BFD VOR/DME via BFD R-270 and CXR R-086 to CXR VOR/DME. Thence . . . .

ERIE TRANSITION (ERI.CXR2): From over ERI VORTAC via ERI R-233 to GEAGA INT, then via CXR R-079 to CXR VOR/DME. Thence . . . .

JAMESTOWN TRANSITION (JHW.CXR2): (For use by BUF departures only and as assigned by ATC) From over JHW VOR/DME via JHW R-245 to ALLCO INT, then via CXR R-079 to CXR VOR/DME. Thence . . . .

YOUNGSTOWN TRANSITION (YNG.CXR2): From over YNG VORTAC via YNG R-302 and CXR R-122 to CXR VOR/DME. Thence . . . .

. . . . From CXR VOR/DME via R-265 to LEBRN INT, expect vectors to final approach course.



ARRIVAL ROUTE DESCRIPTION

CARLETON TRANSITION (CRL.HIMEZ2): From over CRL VORTAC via CRL R-100 to SSUNN INT, then via CXR R-299 to HIMEZ INT. Thence. . . .

GRAND RAPIDS TRANSITION (GRR.HIMEZ2): From over GRR VOR/DME via GRR R-119 to CRL VORTAC, then via CRL R-100 to SSUNN INT, then via CXR R-299 to HIMEZ INT. Thence. . . .

KEELER TRANSITION (ELX.HIMEZ2): From over ELX VOR/DME via ELX R-092 and CRL R-277 to CRL VORTAC, then via CRL R-100 to SSUNN INT, then via CXR R-299 to HIMEZ INT. Thence. . . .

SALEM TRANSITION (SVM.HIMEZ2): From over SVM VORTAC via SVM R-142 to MACCS INT, then via CRL R-100 to SSUNN INT, then via CXR R-299 to HIMEZ INT. Thence. . . .

. . . . From over HIMEZ INT, fly heading 155°. Expect radar vectors to final approach course.

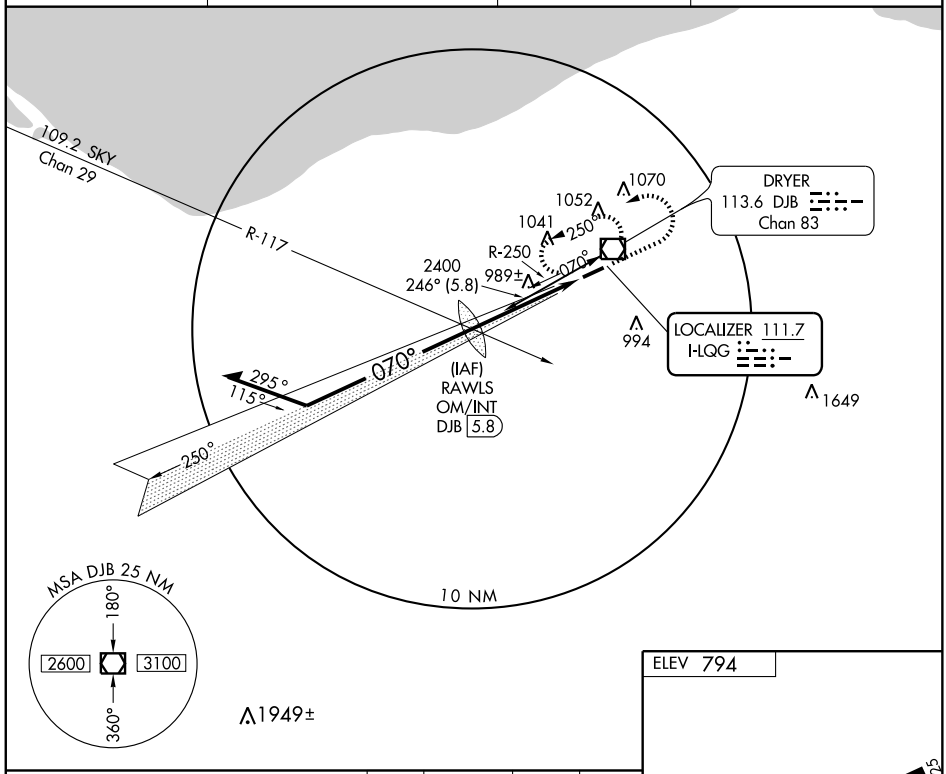
LOC I-LQG	APP CRS	Rwy ldg	5002
111.7	070°	TDZE	794
		Apt Elev	794

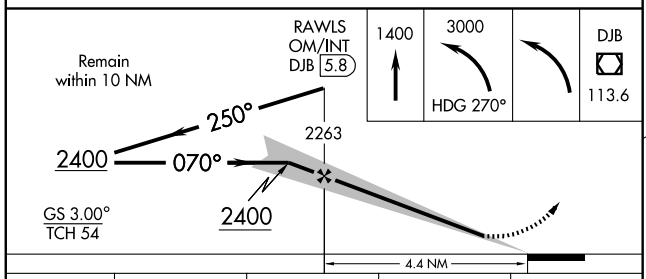
ILS or LOC RWY 7
LORAIN COUNTY RGNL (LPR)

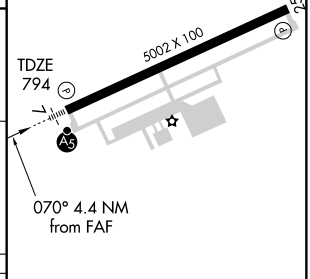
MALSR

MISSED APPROACH: Climb to 1400, then climbing left turn to 3000 via heading 270° then left turn direct DJB VOR/DME and hold.

ASOS	CLEVELAND APP CON	CLNC DEL	UNICOM
121.425	126.35 354.025	125.7	122.7 (CTAF) L







CATEGORY	A	B	C	D
S-ILS 7	994-½ 200 (200-½)			
S-LOC 7	1240-½ 446 (500-½)		1240-¾ 446 (500-¾)	1240-1 446 (500-1)
CIRCLING	1240-1 446 (500-1)	1260-1 466 (500-1)	1260-1½ 466 (500-1½)	1360-2 566 (600-2)

REIL Rwy 25
HIRL Rwy 7-25 L

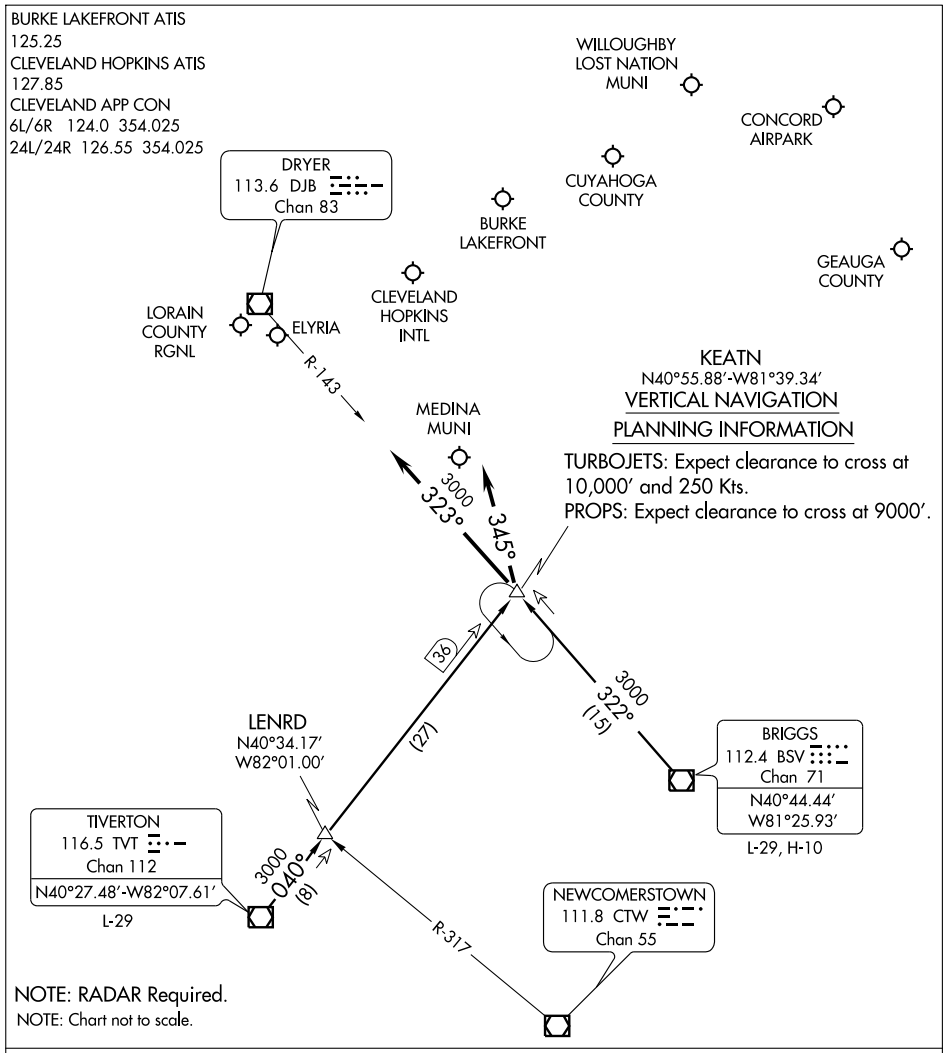
FAF to MAP 4.4 NM					
Knots	60	90	120	150	180
Min:Sec	4:24	2:56	2:12	1:46	1:28

EC-2. 14 JAN 2010 to 11 FEB 2010

KEATN FOUR ARRIVAL

ST-84 (FAA)

CLEVELAND, OHIO



ARRIVAL ROUTE DESCRIPTION

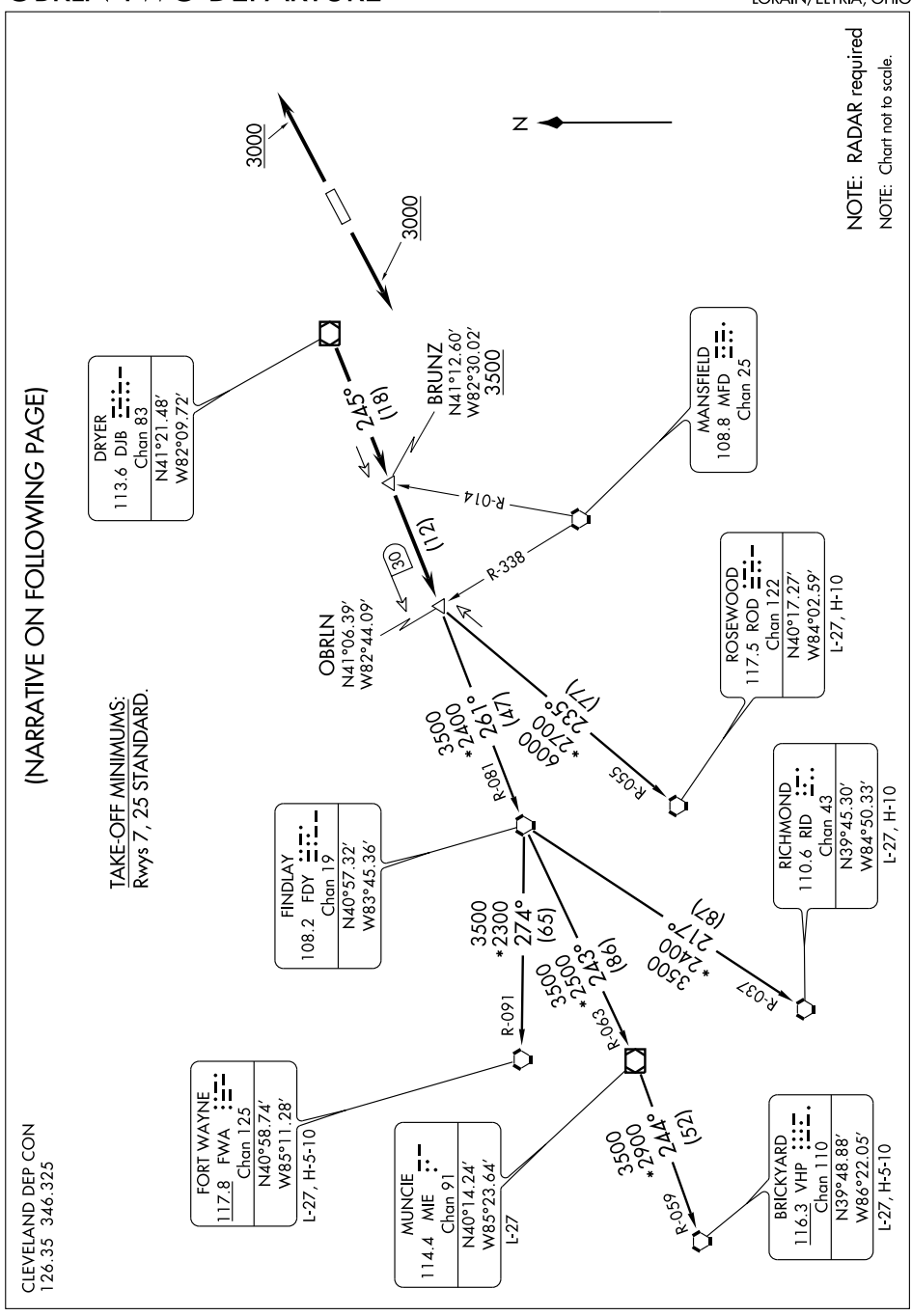
BRIGGS TRANSITION (BSV.KEATN4): From over BSV VOR/DME via BSV R-322 to KEATN INT. Thence. . . .
TIVERTON TRANSITION (TVT.KEATN4): From over TVT VOR/DME via TVT R-040 to KEATN INT. Thence. . . .

LANDING CLE RWY 24L/R: . . . .Depart KEATN INT heading 345°. Expect radar vectors to final approach course.
LANDING CLE RWY 6L/R: . . . .Depart KEATN INT via DJB R-143 to DJB VOR/DME. Expect radar vectors to final approach course.
LANDING ALL OTHER AIRPORTS: . . . .From KEATN INT expect radar vectors to final approach course.

EC-2, 14 JAN 2010 to 11 FEB 2010

OBRLN TWO DEPARTURE

LORAIN COUNTY RGNL (LPR)
LORAIN/ELYRIA, OHIO



OBRLN TWO DEPARTURE

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 7, 25: Climb via assigned heading to 3000 thence. . . .

. . . . or assigned altitude for vectors to intercept DJB VOR/DME R-245, cross BRUNZ INT at or above 3500 then proceed to OBRLN INT then via (transition). Expect filed altitude/flight level ten (10) minutes after departure.

BRICKYARD TRANSITION (OBRLN2.VHP): From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-243 and MIE R-063 to MIE VOR/DME, then via MIE R-244 and VHP R-059 to VHP VORTAC.
FORT WAYNE TRANSITION (OBRLN2.FWA): (For use by Fort Wayne arrivals only and ATC use as assigned.) From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-274 and FWA R-091 to FWA VORTAC.
MUNCIE TRANSITION (OBRLN2.MIE): (For use by Indianapolis arrivals only and ATC use as assigned). From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-243 and MIE R-063 to MIE VOR/DME.
RICHMOND TRANSITION (OBRLN2.RID): From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-217 and RID R-037 to RID VORTAC.
ROSEWOOD TRANSITION (OBRLN2.ROD): (For use at or below FL220 only and ATC use as assigned). From over OBRLN INT via ROD R-055 to ROD VORTAC.

TAKE-OFF OBSTACLES:
Rwy 7: Multiple Trees beginning 973′ from DER, 293′ right of centerline, up to 75′ AGL/865′ MSL.
Multiple Trees beginning 839′ from DER, 636′ left of centerline, up to 47′ AGL/836′ MSL.
Rwy 25: Bush 583′ from DER, 468′ right of centerline, 10′ AGL/809′ MSL.
Tree 1587′ from DER, 698′ left of centerline, 44′ AGL/838′ MSL.
Tree 2277′ from DER, 435′ right of centerline, 58′ AGL/854′ MSL.

WAAS CH 99612 W07A	APP CRS 069°	Rwy ldg 5002 TDZE 793 Apt Elev 793

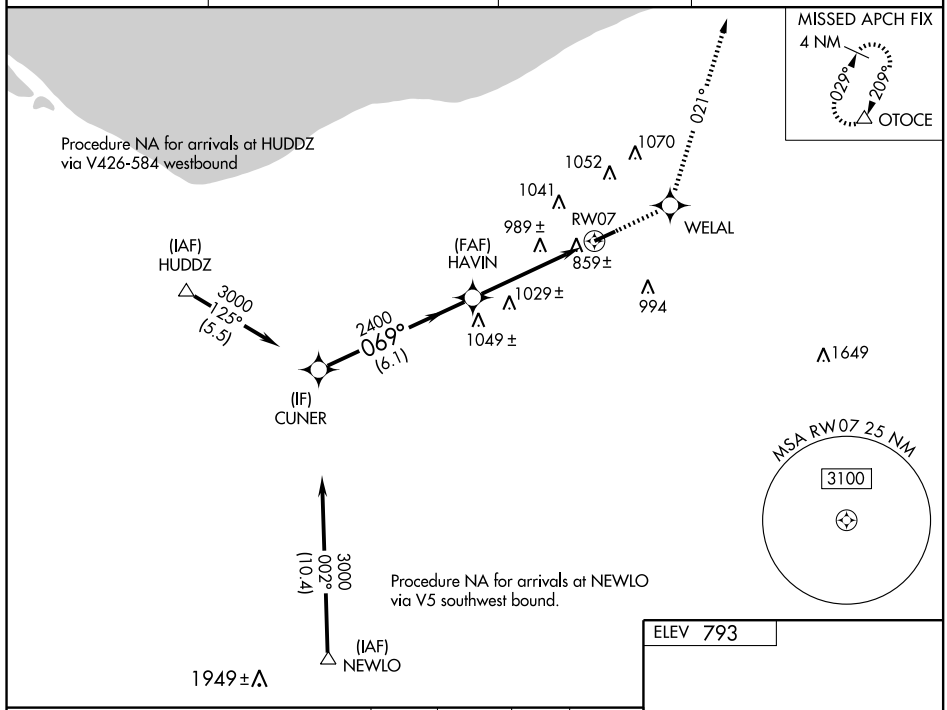
RNAV (GPS) RWY 7
LORAIN COUNTY RGNL (LPR)

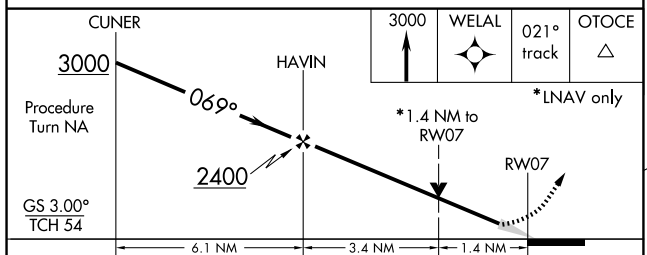
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP -0.3 NA. When local altimeter setting not received, use Cleveland-Hopkins Intl altimeter setting and increase all DA 36 feet, all MDA 40 feet, increase LNAV Cat C/D visibility ¼ mile.
VDP and Baro-VNAV NA when using Cleveland-Hopkins Intl altimeter setting.

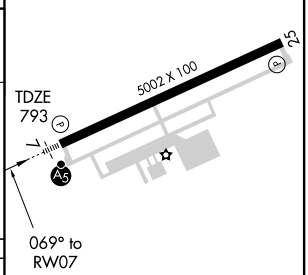
MALSR

MISSED APPROACH: Climb to 3000 direct WELAL and via 021° track to OTOCE and hold.

ASOS	CLEVELAND APP CON	CLNC DEL	UNICOM
121.425	126.35 354.025	125.7	122.7 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	993-½ 200 (200-½)			
LNAV/VNAV DA	1133-¾ 340 (400-¾)			
LNAV MDA	1280-½ 487 (500-½)		1280-¾ 487 (500-¾)	1280-1 487 (500-1)
CIRCLING	1280-1 487 (500-1)		1280-1½ 487 (500-1½)	1360-2 567 (600-2)

REIL Rwy 25
HIRL Rwy 7-25 L

EC-2, 14 JAN 2010 to 11 FEB 2010

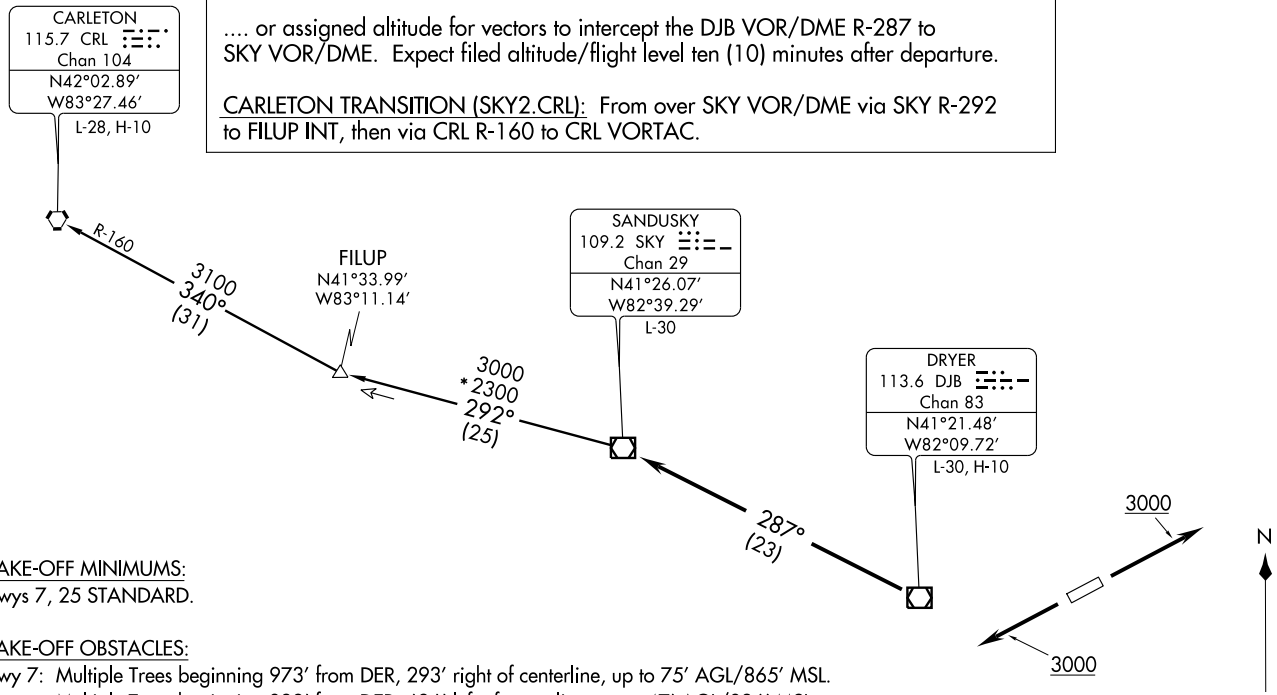
CLEVELAND DEP CON
126.35 346.325

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 7, 25: Climb via assigned heading to 3000 thence....

.... or assigned altitude for vectors to intercept the DJB VOR/DME R-287 to SKY VOR/DME. Expect filed altitude/flight level ten (10) minutes after departure.

CARLETON TRANSITION (SKY2.CRL): From over SKY VOR/DME via SKY R-292 to FILUP INT, then via CRL R-160 to CRL VORTAC.



TAKE-OFF MINIMUMS:
Rwys 7, 25 STANDARD.

TAKE-OFF OBSTACLES:
Rwy 7: Multiple Trees beginning 973′ from DER, 293′ right of centerline, up to 75′ AGL/865′ MSL.
Multiple Trees beginning 839′ from DER, 636′ left of centerline, up to 47′ AGL/836′ MSL.
Rwy 25: Bush 583′ from DER, 468′ right of centerline, 10′ AGL/809′ MSL.
Tree 1587′ from DER, 698′ left of centerline, 44′ AGL/838′ MSL.
Tree 2277′ from DER, 435′ right of centerline, 58′ AGL/854′ MSL.

NOTE: RADAR required
NOTE: Turboprop aircraft only
NOTE: Chart not to scale.

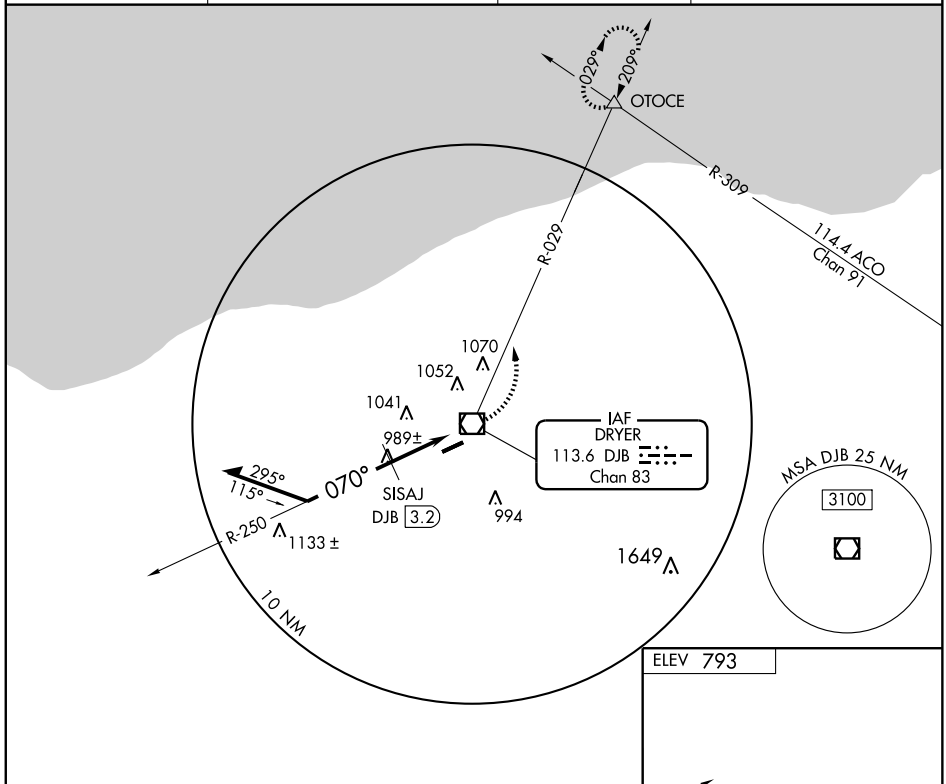
VOR/DME DJB 113.6 Chan 83	APP CRS 070°	Rwy ldg N/A TDZE N/A Apt Elev 793

VOR-A
LORAIN COUNTY RGNL (LPR)

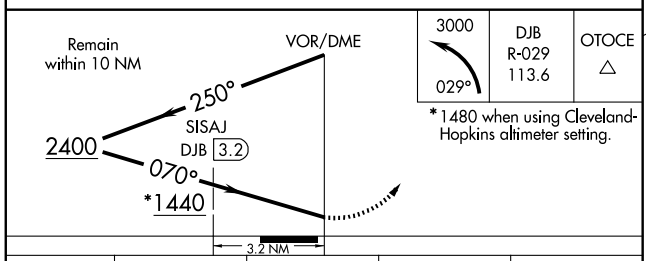
When local altimeter setting not received, use Cleveland-Hopkins Intl altimeter setting and increase all MDA 40 feet, increase circling Cat C/D visibility ¼ mile.

MISSED APPROACH: Climbing left turn to 3000 via heading 029° and DJB VOR/DME R-029 direct OTOCE INT and hold.

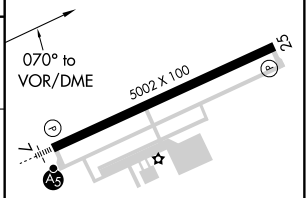
ASOS	CLEVELAND APP CON	CLNC DEL	UNICOM
121.425	126.35 354.025	125.7	122.7 (CTAF) L



ELEV 793



*1480 when using Cleveland-Hopkins altimeter setting.



CATEGORY	A	B	C	D
CIRCLING	1440-1 647 (700-1)		1440-1¾ 647 (700-1¾)	1440-2 647 (700-2)
SISAJ DME MINIMUMS				
CIRCLING	1300-1 507 (600-1)		1300-1½ 507 (600-1½)	1360-2 567 (600-2)

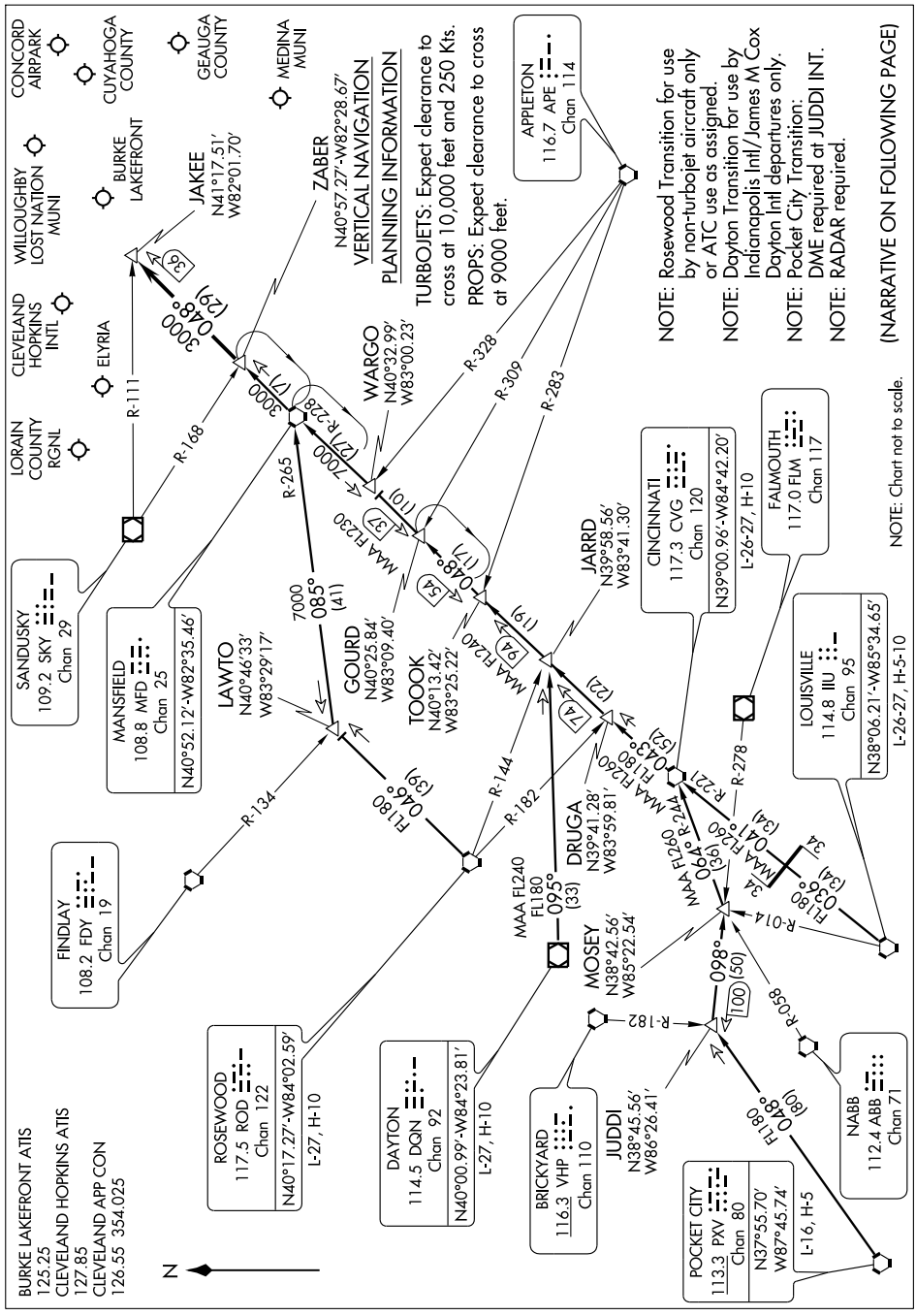
REIL Rwy 25
HIRL Rwy 7-25 L

EC-2, 14 JAN 2010 to 11 FEB 2010

ZABER ONE ARRIVAL

ST-84 (FAA)

CLEVELAND, OHIO



ARRIVAL ROUTE DESCRIPTION

CINCINNATI TRANSITION (CVG.ZABER1): From over CVG VORTAC via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

DAYTON TRANSITION (DQN.ZABER1): (For use by INDIANAPOLIS INTL/JAMES M COX DAYTON INTL departures only). From over DQN VOR/DME via DQN R-095 to JARRD INT, then via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

LOUISVILLE TRANSITION (IIU.ZABER1): From over IIU VORTAC via IIU R-036 and CVG R-221 to CVG VORTAC, then via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

POCKET CITY TRANSITION (PXV.ZABER1): (DME REQUIRED at JUDDI INT) From over PXV VORTAC via PXV R-048 to JUDDI INT, then via FLM R-278 to MOSEY INT, then via CVG R-244 to CVG VORTAC, then via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

ROSEWOOD TRANSITION (ROD.ZABER1): (For use by non-turbo aircraft only or ATC use as assigned). From over ROD VORTAC via ROD R-046 to LAWTO INT, then via MFD R-265 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

. . . . From over ZABER INT via MFD R-048 to JAKEE INT. Expect radar vectors to final approach course.

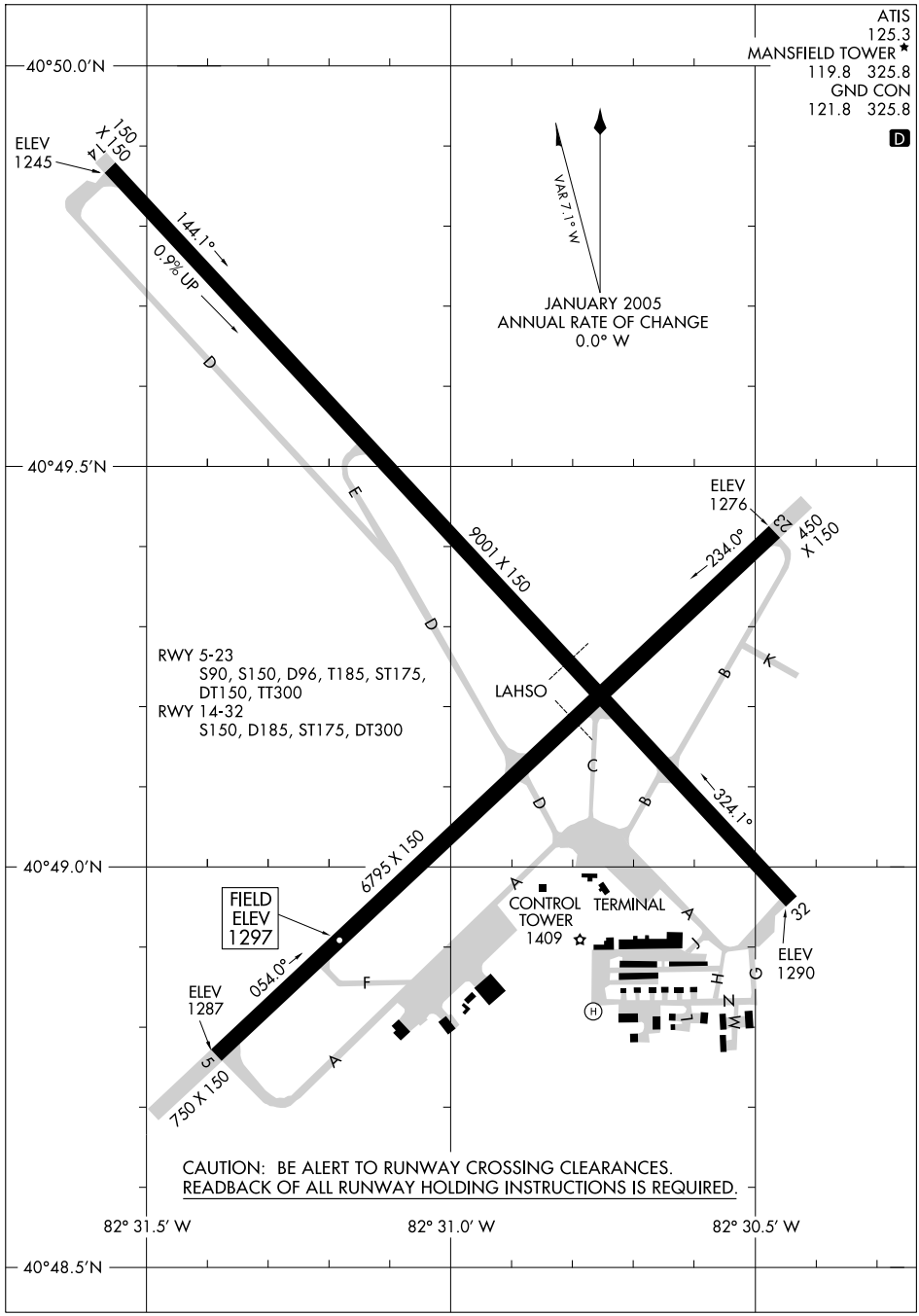
EC-2, 14 JAN 2010 to 11 FEB 2010

09351

AIRPORT DIAGRAM

AL-860 (FAA)

MANSFIELD LAHM RGNL (MFD)
MANSFIELD, OHIO



EC-2, 14 JAN 2010 to 11 FEB 2010

VORTAC MFD 108.8 Chan 25	APCH CRS 130°	Rwy ldg 9001 TDZE 1276 Arpt Elev 1297

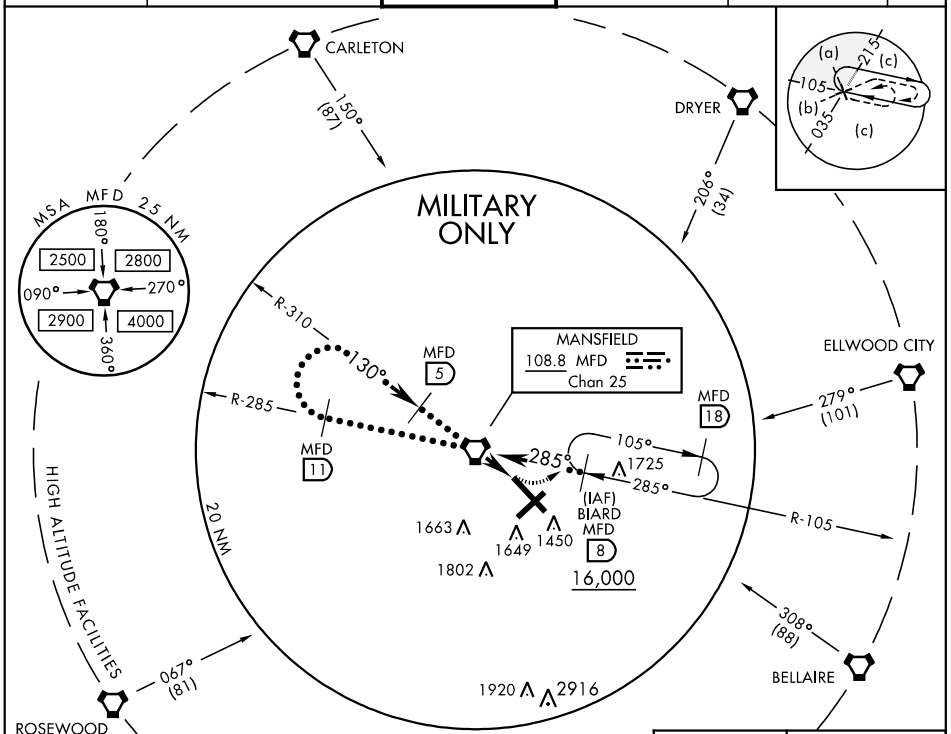
HI-VOR/DME or TACAN RWY 14

JAL-860 [USAF]

MANSFIELD LAHM RGNL (KMFD)

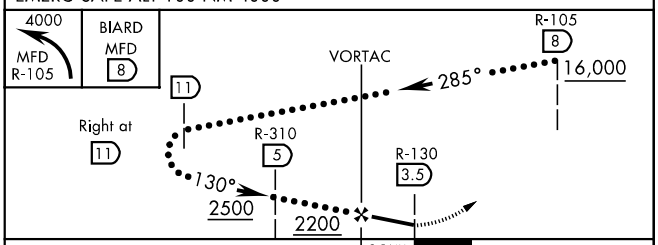
MISSED APPROACH: Climbing left turn to 4000 via MFD R-105 to BIARD 8 DME and hold.

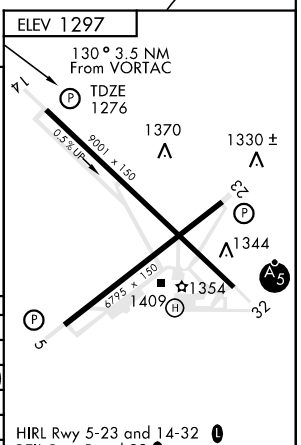
ATIS	MANSFIELD APP CON	MANSFIELD TOWER	GND CON	UNICOM	ASR
125.3	124.2 390.8	119.8 (L) 325.8	121.8 325.8	122.95	



When control tower closed use Cleveland-Hopkins altimeter setting.

EMERG SAFE ALT 100 NM 4000





CATEGORY	C	D	E
S-14	1620-1 344 (400-1)	1620-1¼ 344 (400-1¼)	
CIRCLING	1760-1½ 463 (500-1½)	1860-2 563 (600-2)	2000-2¼ 703 (800-2¼)
CLEVELAND-HOPKINS ALTIMETER SETTINGS MINIMUMS			
S-14	1920-1¾ 644 (700-1¾)	1920-2 644 (700-2)	1920-2¼ 644 (700-2¼)
CIRCLING	2060-2¼ 763 (800-2¼)	2120-2¾ 823(900-2¾)	2300-3 1003 (1100-3)

HIRL Rwy 5-23 and 14-32 (L)
REIL Rwy 5 and 23 (L)

LOC I-MFD	APP CRS	Rwy ldg	9001
110.5	323°	TDZE	1293
		Apt Elev	1297

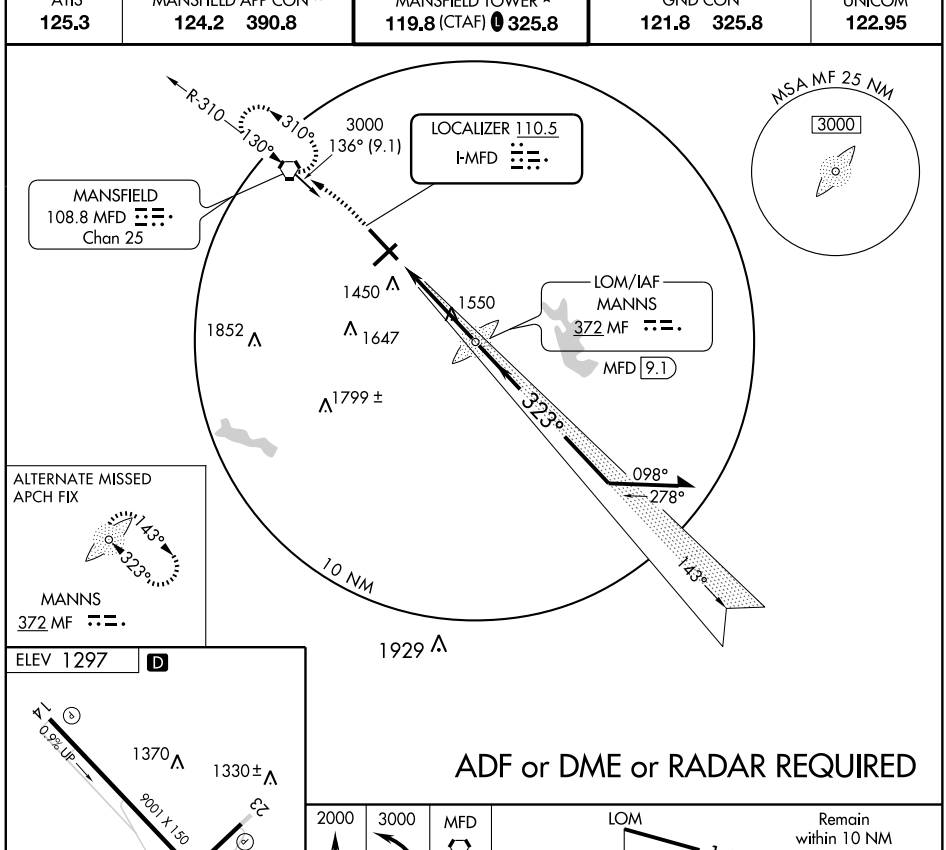
ILS or LOC RWY 32
MANSFIELD LAHM RGNL (MFD)

T A ASR — When local altimeter setting not received, use Marion altimeter setting and increase all DA 107 feet, all MDA 120 feet, increase S-LOC 32 Cat C/D visibility ½ mile and Circling Cat C visibility ½ mile, Cat D ¼ mile. For inoperative MALSR when using Marion altimeter setting, increase S-ILS 32 visibility ½ mile all Cats.

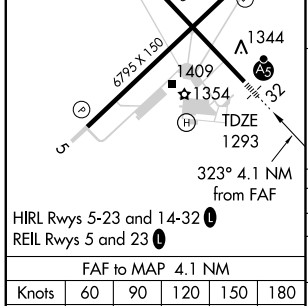
MALSR

MISSED APPROACH: Climb to 2000 then climbing left turn to 3000 direct MFD VORTAC and hold.

ATIS	MANSFIELD APP CON ★	MANSFIELD TOWER ★	GND CON	UNICOM
125.3	124.2 390.8	119.8 (CTAF) L 325.8	121.8 325.8	122.95

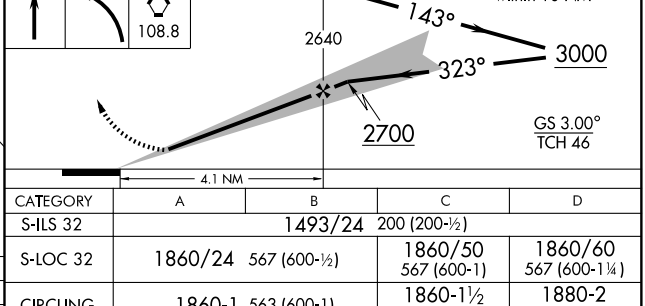


ADF or DME or RADAR REQUIRED



HIRL Rwys 5-23 and 14-32 L
REIL Rwys 5 and 23 L

FAF to MAP 4.1 NM					
Knots	60	90	120	150	180
Min:Sec	4:06	2:44	2:03	1:38	1:22



CATEGORY	A	B	C	D
S-ILS 32	1493/24 200 (200-½)			
S-LOC 32	1860/24 567 (600-½)		1860/50 567 (600-1)	1860/60 567 (600-1¼)
CIRCLING	1860-1 563 (600-1)		1860-1½ 563 (600-1½)	1880-2 583 (600-2)

EC-2, 14 JAN 2010 to 11 FEB 2010

LOM MF	APP CRS	Rwy ldg	9001
372	323°	TDZE	1293
		Apt Elev	1297

NDB RWY 32

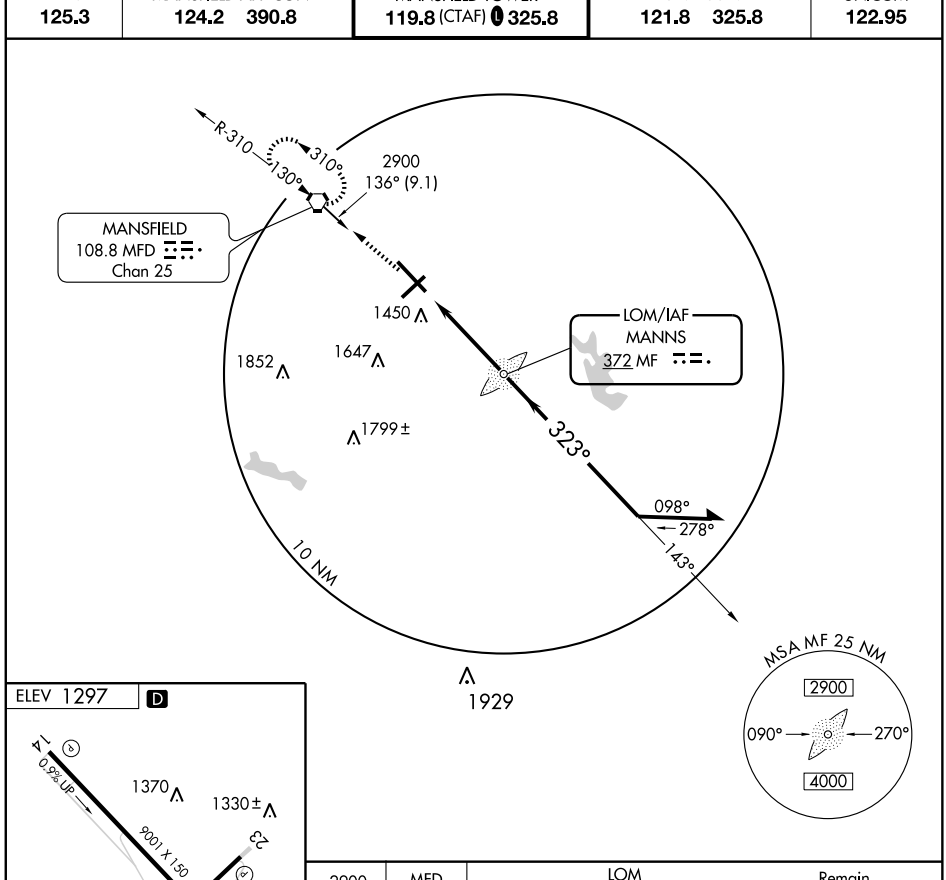
MANSFIELD LAHM RGNL (MFD)

ASR

MALSR

MISSED APPROACH: Climb to 2900 direct MFD VORTAC and hold.

ATIS	MANSFIELD APP CON ★	MANSFIELD TOWER ★	GND CON	UNICOM
125.3	124.2 390.8	119.8 (CTAF) L 325.8	121.8 325.8	122.95



HIRL Rwys 5-23 and 14-32 L
REIL Rwys 5 and 23 L

FAF to MAP 4 NM					
Knots	60	90	120	150	180
Min:Sec	4:00	2:40	2:00	1:36	1:20

CATEGORY	A	B	C	D
S-32	1900/40 607 (700-¾)		1900/60 607 (700-1¼)	1900-1¾ 607 (700-1¾)
CIRCLING	1900-1 603 (700-1)		1900-1¾ 603 (700-1¾)	1900-2 603 (700-2)

EC-2. 14 JAN 2010 to 11 FEB 2010

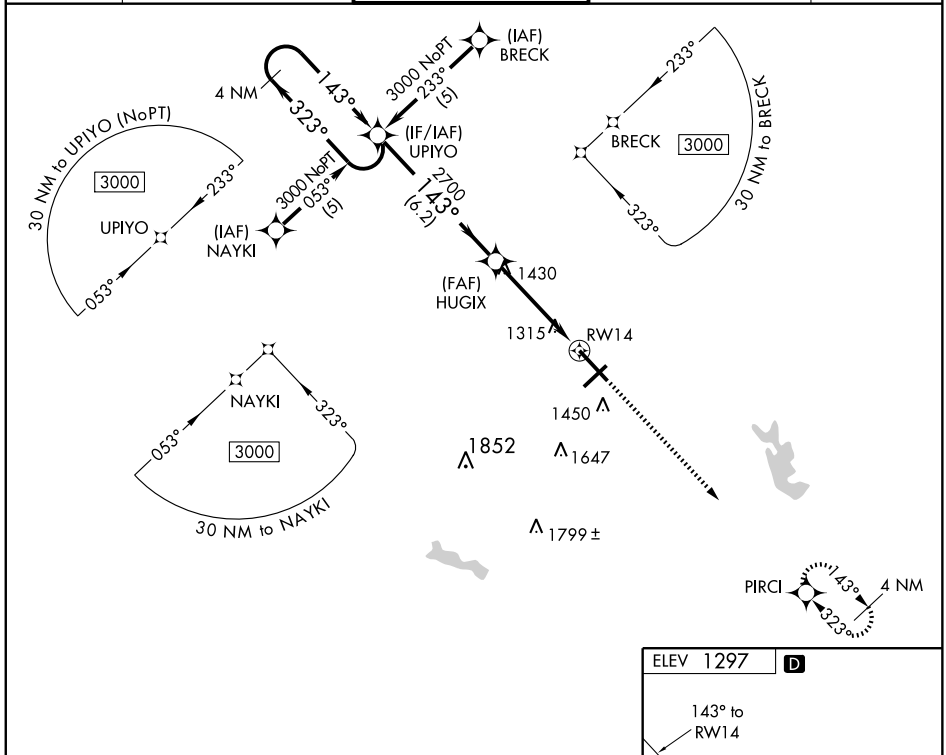
APP CRS	Rwy ldg	9001
143°	TDZE	1276
	Apt Elev	1297

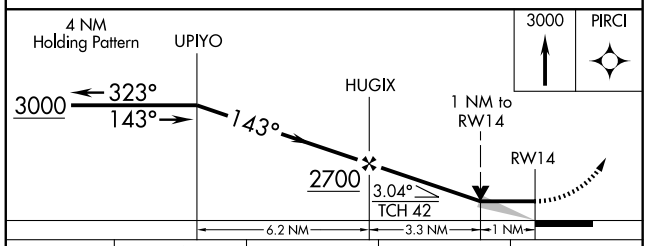
RNAV (GPS) RWY 14
MANSFIELD LAHM RGNL (MFD)

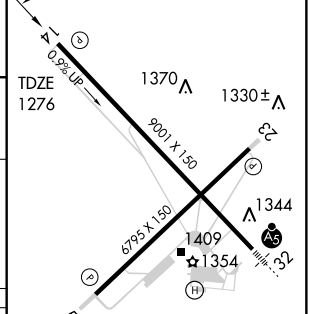
DME/DME RNP-0.3 NA. When local altimeter setting not received, use Marion altimeter setting and increase all MDA 120 feet and LNAV Cat C and Circling Cat D visibility ¼ mile. VDP NA with Marion altimeter setting.

MISSED APPROACH: Climb to 3000 direct PIRCI and hold.

ATIS	MANSFIELD APP CON ★		MANSFIELD TOWER ★	GND CON	UNICOM
125.3	124.2	390.8	119.8 (CTAF) L 325.8	121.8 325.8	122.95







CATEGORY	A	B	C	D
LNAV MDA	1620-1 344 (400-1)			1620-1¼ 344 (400-1¼)
CIRCLING	1760-1 463 (500-1)		1760-1½ 463 (500-1½)	1880-2 583 (600-2)

HIRL Rwys 5-23 and 14-32 L
REIL Rwys 5 and 23 L

EC-2, 14 JAN 2010 to 11 FEB 2010

WAAS CH 99611 W32A	APP CRS 323°	Rwy ldg 9001 TDZE 1293 Apt Elev 1297

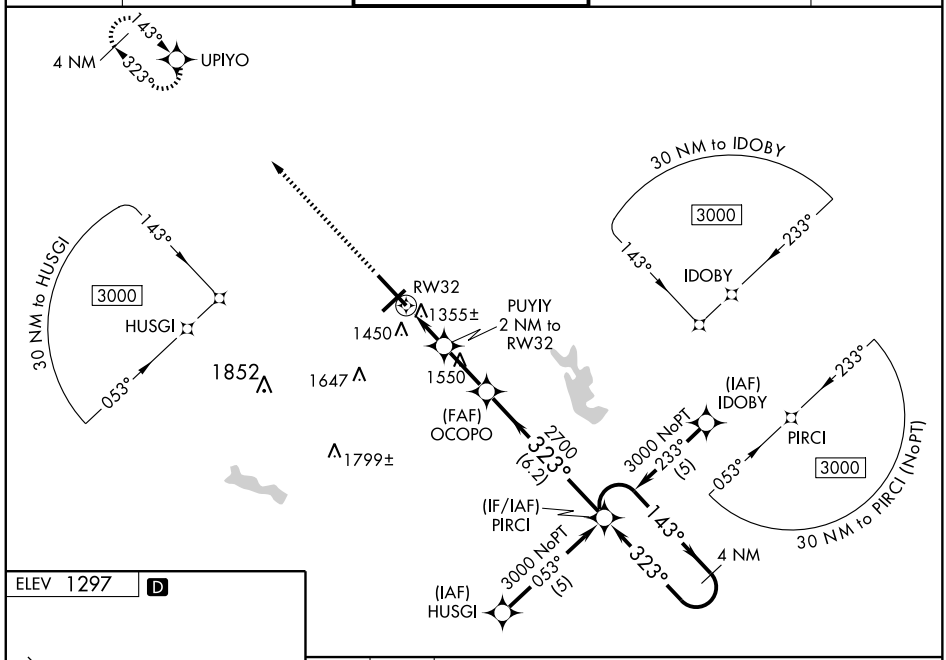
RNAV (GPS) RWY 32
MANSFIELD LAHM RGNL (MFD)

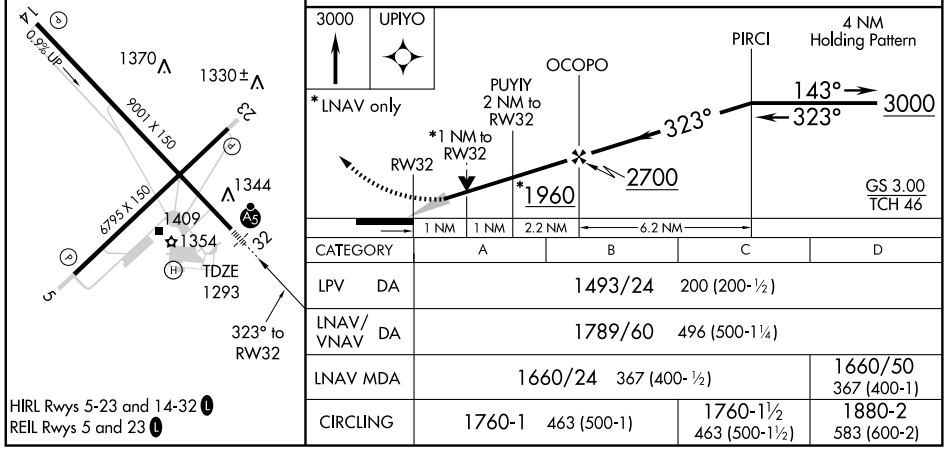
Baro-VNAV NA when using Marion altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Marion altimeter setting and increase all DA 107 feet and all MDA 120 feet, LNAV Cat C and Circling Cat D visibility ¼ mile, LNAV/VNAV all Cats ½ mile. For inoperative MALSR increase LNAV Cat D visibility ¼ mile. For inoperative MALSR when using Marion altimeter setting increase LPV all Cats visibility to 1. VDP NA with Marion altimeter setting.

MALSR

MISSED APPROACH: Climb to 3000 direct UPIYO and hold.

ATIS	MANSFIELD APP CON ★	MANSFIELD TOWER ★	GND CON	UNICOM
125.3	124.2 390.8	119.8 (CTAF) L 325.8	121.8 325.8	122.95





CATEGORY	A	B	C	D
LPV DA	1493/24 200 (200-½)			
LNAV/VNAV DA	1789/60 496 (500-1¼)			
LNAV MDA	1660/24 367 (400-½)			1660/50 367 (400-1)
CIRCLING	1760-1 463 (500-1)		1760-1½ 463 (500-1½)	1880-2 583 (600-2)

HIRL Rwys 5-23 and 14-32 L
REIL Rwys 5 and 23 L

MANSFIELD, OHIO

AL-860 (FAA)

VORTAC MFD 108.8 Chan 25	APP CRS 230°	Rwy ldg 6795 TDZE 1295 Apt Elev 1297

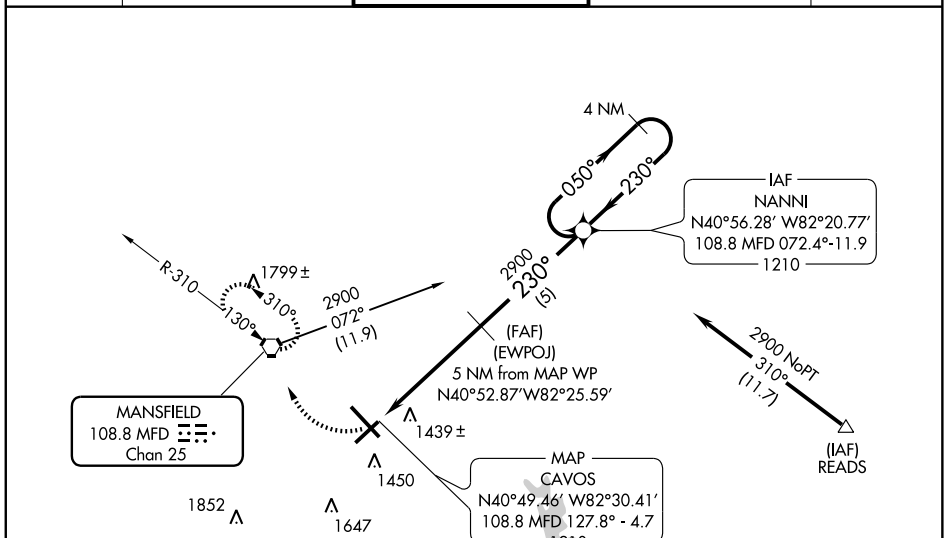
VOR/DME RNAV or GPS RWY 23

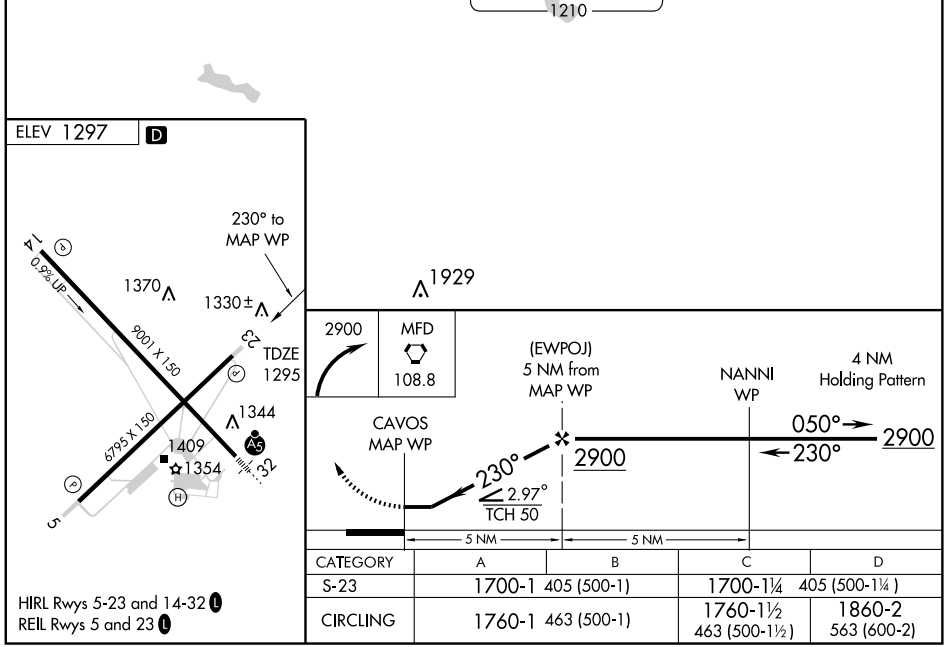
MANSFIELD LAHM RGNL (MFD)

ASR

MISSED APPROACH: Climbing right turn to 2900 direct MFD VORTAC and hold.

ATIS	MANSFIELD APP CON ★	MANSFIELD TOWER ★	GND CON	UNICOM
125.3	124.2 390.8	119.8 (CTAF) L 325.8	121.8 325.8	122.95





CATEGORY	A	B	C	D
S-23	1700-1	405 (500-1)	1700-1¼	405 (500-1¼)
CIRCLING	1760-1	463 (500-1)	1760-1½ 463 (500-1½)	1860-2 563 (600-2)

HIRL Rwys 5-23 and 14-32 L
REIL Rwys 5 and 23 L

EC-2, 14 JAN 2010 to 11 FEB 2010

VORTAC MFD	APP CRS	Rwy ldg	9001
108.8	130°	TDZE	1276
Chan 25		Apt Elev	1297

VOR RWY 14

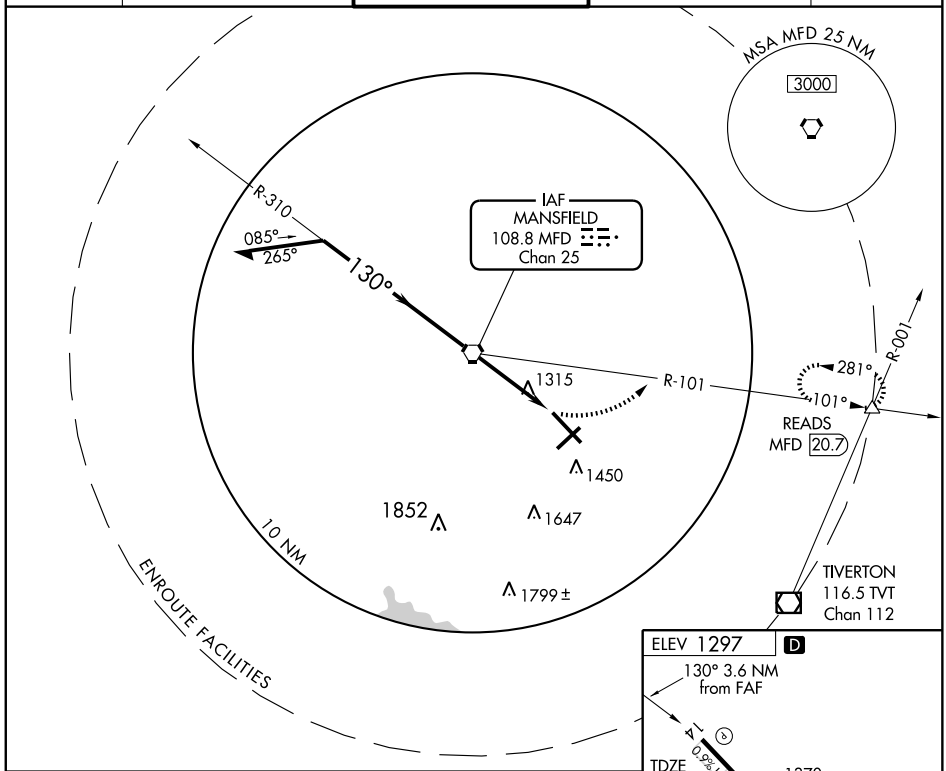
MANSFIELD LAHM RGNL (MFD)

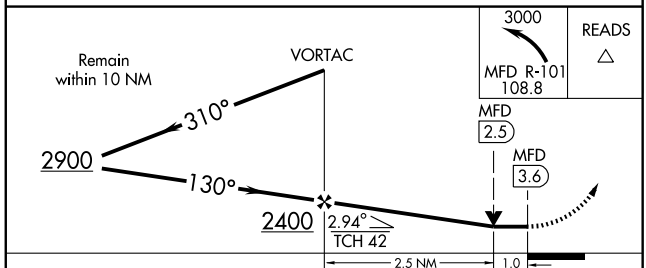
ASR

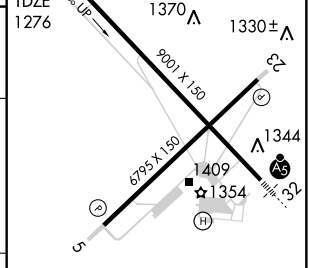
When local altimeter setting not received, use Marion altimeter setting and increase all MDA 120 feet, S-14 visibility Cats C and D ¼ mile and Circling Cat D ¼ mile. VDP NA with Marion altimeter setting. Inoperative table does not apply.

MISSED APPROACH: Climbing left turn to 3000 via MFD R-101 to READS Int/MFD 20.7 DME and hold.

ATIS	MANSFIELD APP CON ★		MANSFIELD TOWER ★	GND CON	UNICOM
125.3	124.2	390.8	119.8 (CTAF) L 325.8	121.8 325.8	122.95







HIRL Rwys 5-23 and 14-32 L
REIL Rwys 5 and 23 L

FAF to MAP 3.6 NM					
Knots	60	90	120	150	180
Min:Sec	3:36	2:24	1:48	1:26	1:12

CATEGORY	A	B	C	D
S-14	1620-1 344 (400-1)			1620-1¼ 344 (400-1¼)
CIRCLING	1760-1 463 (500-1)		1760-1½ 463 (500-1½)	1880-2 583 (600-2)

VORTAC MFD 108.8 Chan 25	APP CRS 313°	Rwy ldg 9001 TDZE 1293 Apt Elev 1297

VOR RWY 32

MANSFIELD LAHM RGNL (MFD)

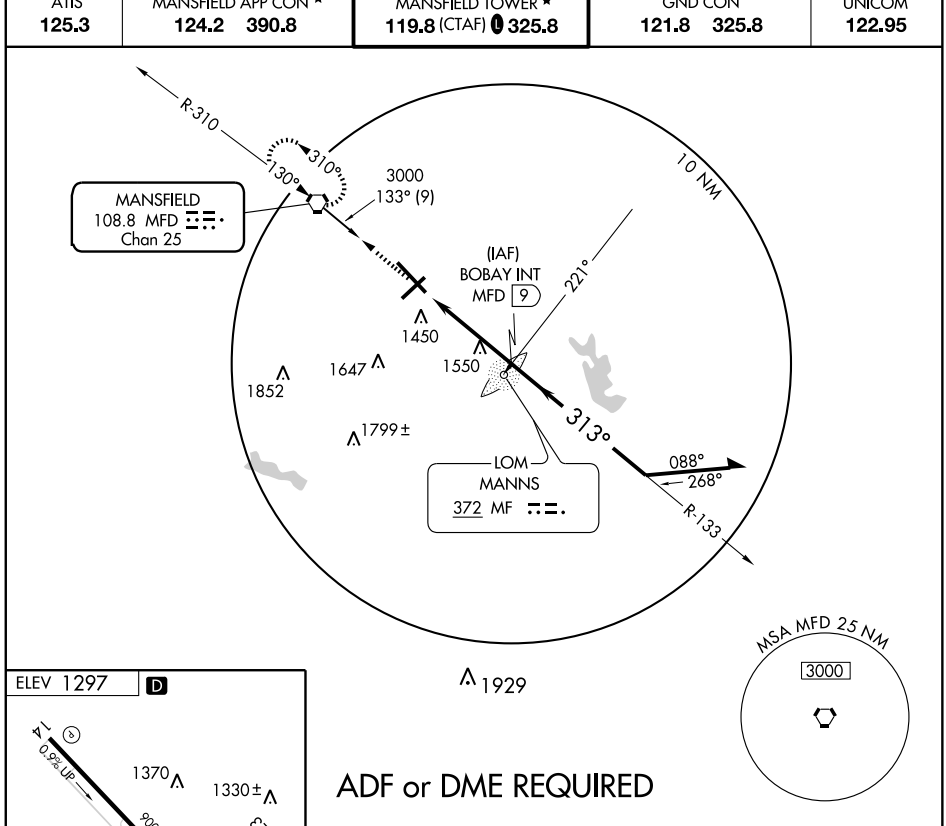
When local altimeter setting not received, use Marion altimeter setting and increase all MDA 120 feet, S-32 visibility Cats C and D ½ mile and Circling Cat C ½ mile, Cat D ¼ mile. VDP NA with Marion altimeter setting. ADF or DME Required.

ASR

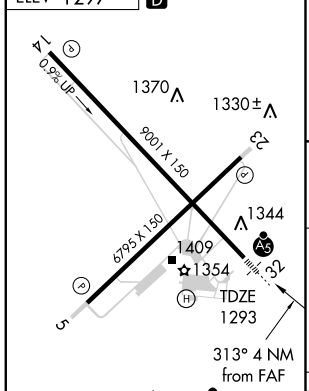
MALSR

MISSED APPROACH: Climb to 3000 direct MFD VORTAC and hold.

ATIS	MANSFIELD APP CON ★	MANSFIELD TOWER ★	GND CON	UNICOM
125.3	124.2 390.8	119.8 (CTAF) L 325.8	121.8 325.8	122.95

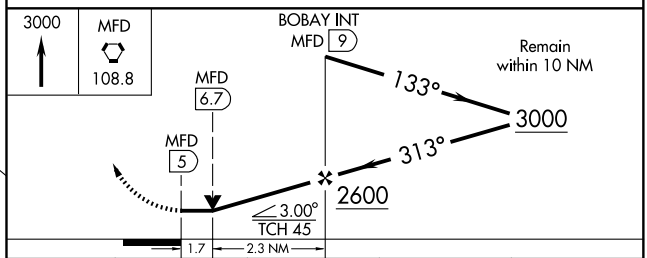


ADF or DME REQUIRED



HIRL Rwys 5-23 and 14-32 L
REIL Rwys 5 and 23 L

FAF to MAP 4 NM					
Knots	60	90	120	150	180
Min:Sec	4:00	2:40	2:00	1:36	1:20



CATEGORY	A	B	C	D
S-32	1860/24 567 (600-½)		1860/50 567 (600-1)	1860/60 567 (600-1¼)
CIRCLING	1860-1 563 (600-1)		1860-1½ 563 (600-1½)	1880-2 583 (600-2)

EC-2, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-AEF	APP CRS	Rwy ldg	5000
110.35	245°	TDZE	993
Chan 40 (Y)		Apt Elev	993

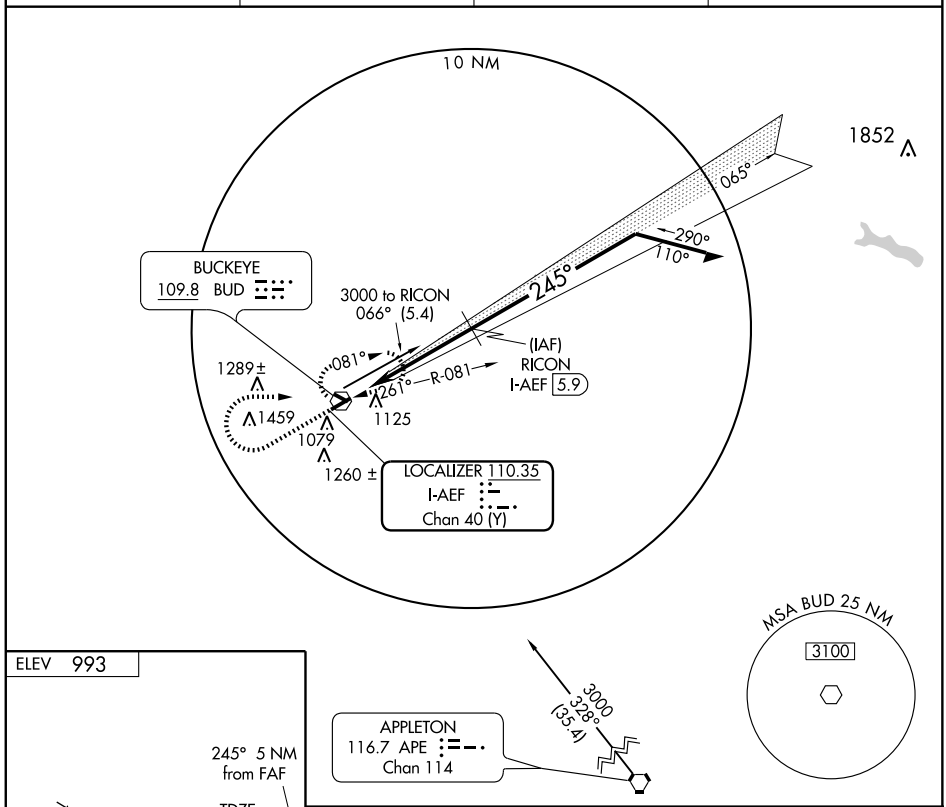
LOC/DME RWY 25

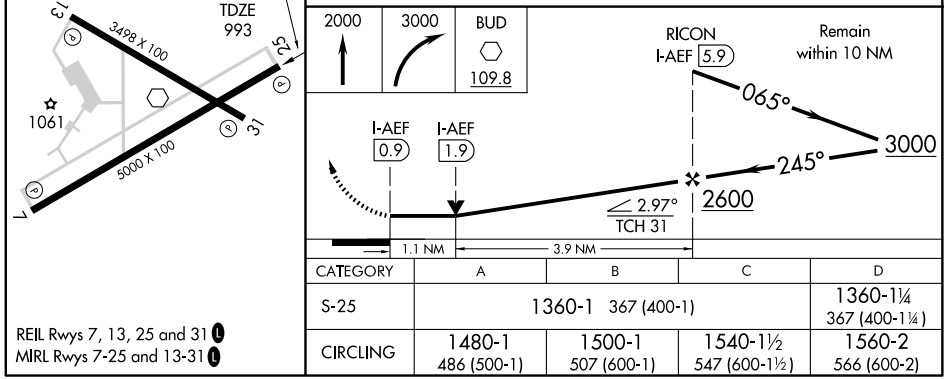
MARION MUNI (MNN)

If local altimeter setting not received, use Ohio State University altimeter setting and increase all MDA 100 feet. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 2000, then climbing right turn to 3000 direct BUD VOR and hold.

ASOS	MANSFIELD APP CON ★		CLNC DEL	UNICOM
119.975	124.2	390.8	126.8	122.8 (CTAF) L





CATEGORY	A	B	C	D
S-25	1360-1 367 (400-1)			1360-1¼ 367 (400-1¼)
CIRCLING	1480-1 486 (500-1)	1500-1 507 (600-1)	1540-1½ 547 (600-1½)	1560-2 566 (600-2)

REIL Rwys 7, 13, 25 and 31 L
MIRL Rwys 7-25 and 13-31 L

EC-2, 14 JAN 2010 to 11 FEB 2010

MARION, OHIO

AL-5352 (FAA)

WAAS CH 93604 W07A	APP CRS 065°	Rwy ldg 5000 TDZE 990 Apt Elev 993

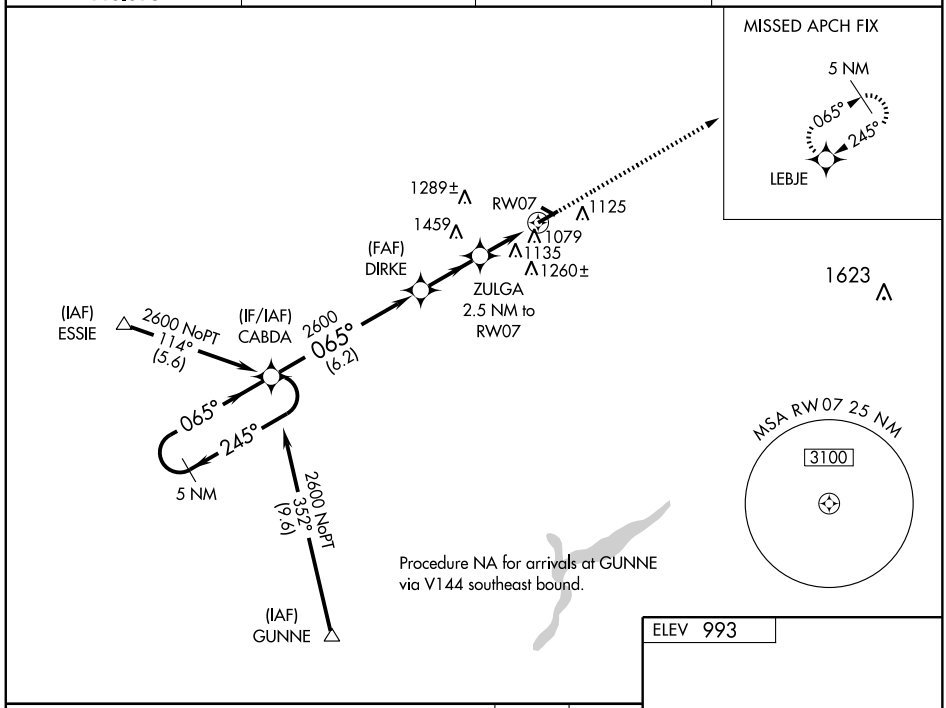
RNAV (GPS) RWY 7

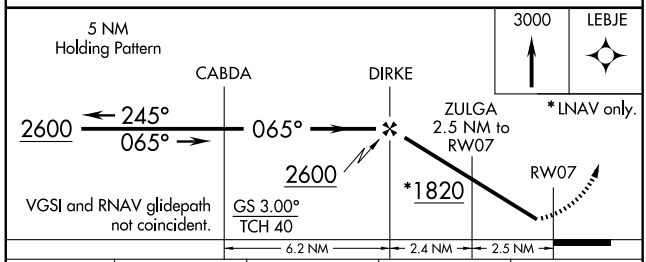
MARION MUNI (MNN)

If local altimeter setting not received, use Ohio State University altimeter setting and increase LPV DA 87 feet, LNAV/VNAV DA 195 feet, and all MDAS 100 feet. Baro-VNAV NA when using Ohio State University altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 46°C (114°F). Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA.

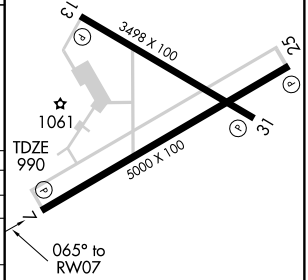
MISSED APPROACH: Climb to 3000 direct LEBJE and hold.

ASOS	MANSFIELD APP CON *	CLNC DEL	UNICOM
119.975	124.2 390.8	126.8	122.8 (CTAF) L





ELEV 993



CATEGORY	A	B	C	D
LPV DA	1240-1 250 (300-1)			
LNAV/VNAV DA	1379-1½ 389 (400-1½)			
LNAV MDA	1440-1 450 (500-1)		1440-1¼ 450 (500-1¼)	1440-1½ 450 (500-1½)
CIRCLING	1480-1 487 (500-1)	1500-1 507 (600-1)	1540-1½ 547 (600-1½)	1560-2 567 (600-2)

REIL Rwys 7, 13, 25 and 31 L

MIRL Rwys 7-25 and 13-31 L

EC-2, 14 JAN 2010 to 11 FEB 2010

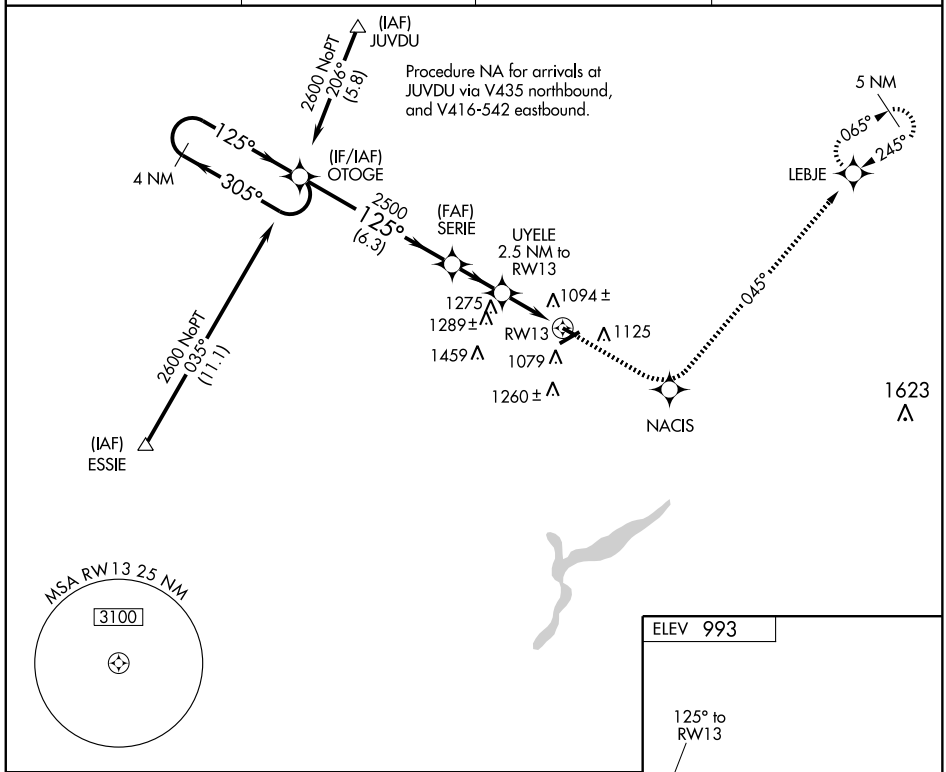
APP CRS	Rwy ldg	3498
125°	TDZE	990
	Apt Elev	993

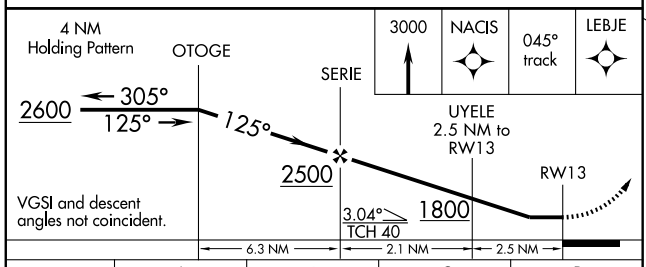
RNAV (GPS) RWY 13
MARION MUNI (MNN)

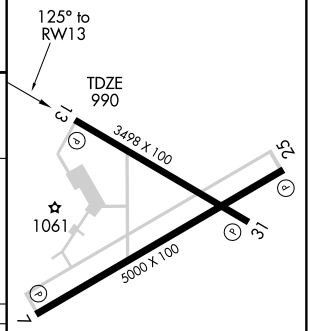
DME/DME RNP-0.3 NA.
Visibility reduction by helicopters NA.
When local altimeter setting not received, use Ohio State altimeter setting and increase all MDAs 100 feet and visibility Cats C and D and circling Cat C ¼ mile.

MISSED APPROACH: Climb to 3000 direct NACIS and via 045° track to LEBJE and hold.

ASOS	MANSFIELD APP CON ★		CLNC DEL	UNICOM
119.975	124.2	390.8	126.8	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	1360-1 370 (400-1)			1360-1¼ 370 (400-1¼)
CIRCLING	1480-1 487 (500-1)	1500-1 507 (600-1)	1540-1½ 547 (600-1½)	1560-2 567 (600-2)

REIL Rwys 7, 13, 25 and 31 L
MIRL Rwys 7-25 and 13-31 L

EC-2, 14 JAN 2010 to 11 FEB 2010

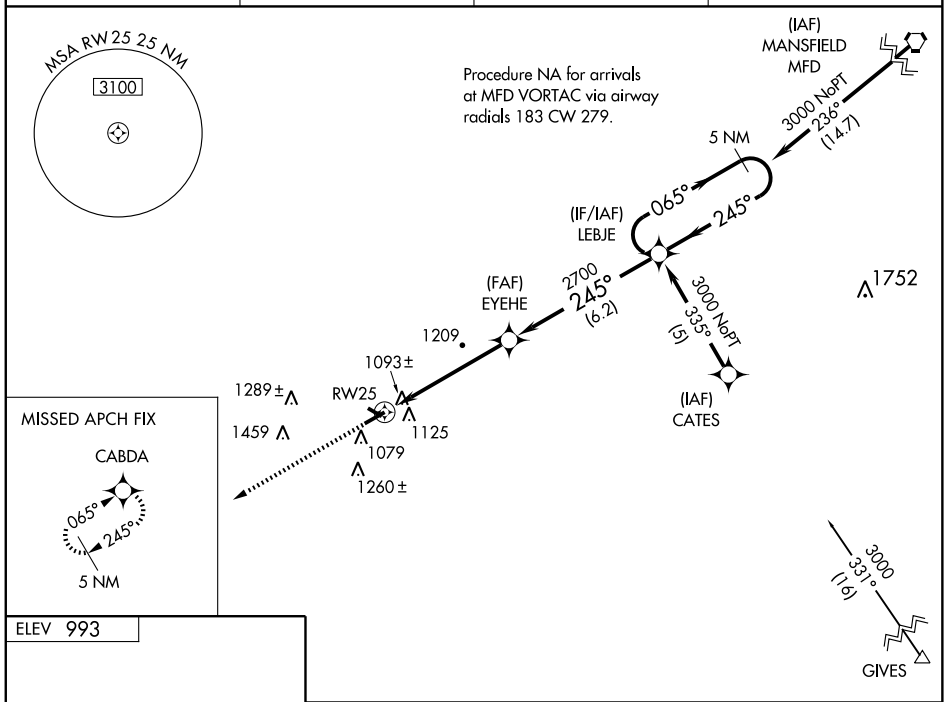
WAAS CH 62904 W25A	APP CRS 245°	Rwy ldg 5000 TDZE 993 Apt Elev 993

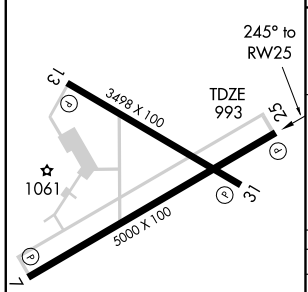
RNAV (GPS) RWY 25
MARION MUNI (MNN)

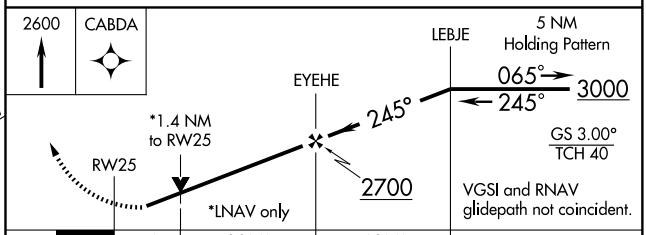
If local altimeter setting not received, use Ohio State University altimeter setting and increase all DAs 87 feet and all MDAs 100 feet. Baro-VNAV NA when using Ohio State University altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2600 direct CABDA and hold.

ASOS	MANSFIELD APP CON ★	CLNC DEL	UNICOM
119.975	124.2 390.8	126.8	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	1334-1¼ 341 (400-1¼)			
LNAV/VNAV DA	1443-1½ 450 (500-1½)			
LNAV MDA	1460-1 467 (500-1)		1460-1¼ 467 (500-1¼)	1460-1½ 467 (500-1½)
CIRCLING	1480-1 487 (500-1)	1500-1 507 (600-1)	1540-1½ 547 (600-1½)	1560-2 567 (600-2)

REIL Rwys 7, 13, 25 and 31 L
MIRL Rwys 7-25 and 13-31 L

EC-2, 14 JAN 2010 to 11 FEB 2010

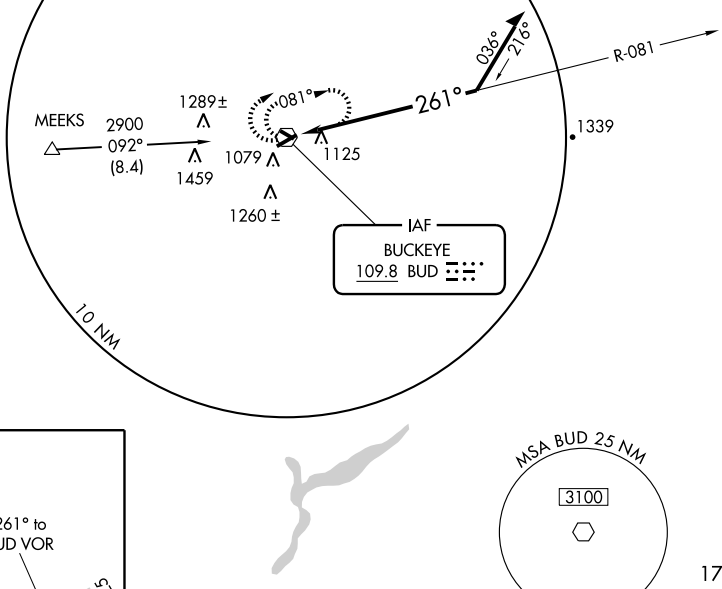
VOR BUD	APP CRS	Rwy ldg	N/A
109.8	261°	TDZE	N/A
		Apt Elev	993

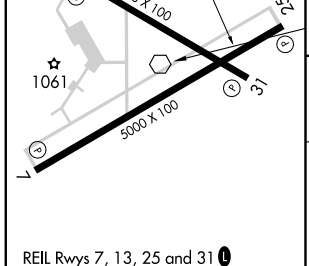
VOR-A
MARION MUNI (MNN)

If local altimeter setting not received, use Ohio State University altimeter setting and increase all MDAs 100 feet.

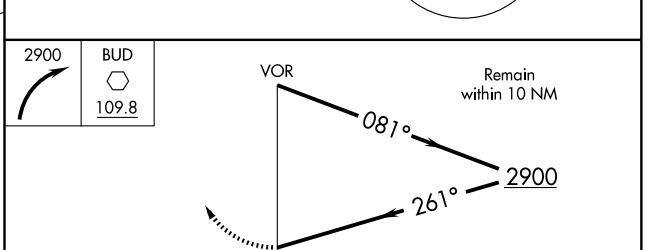
MISSED APPROACH: Climbing right turn to 2900 in BUD VOR holding pattern.

ASOS	MANSFIELD APP CON ★		CLNC DEL	UNICOM
119.975	124.2	390.8	126.8	122.8 (CTAF) L





REIL Rwys 7, 13, 25 and 31 L
MIRL Rwys 7-25 and 13-31 L



Knots	60	90	120	150	180
Min:Sec					

CATEGORY	A	B	C	D
CIRCLING	1640-1 647 (700-1)		1640-1¾ 647 (700-1¾)	1640-2 647 (700-2)

APP CRS	Rwy ldg	4218
088°	TDZE	1021
	Apt Elev	1021

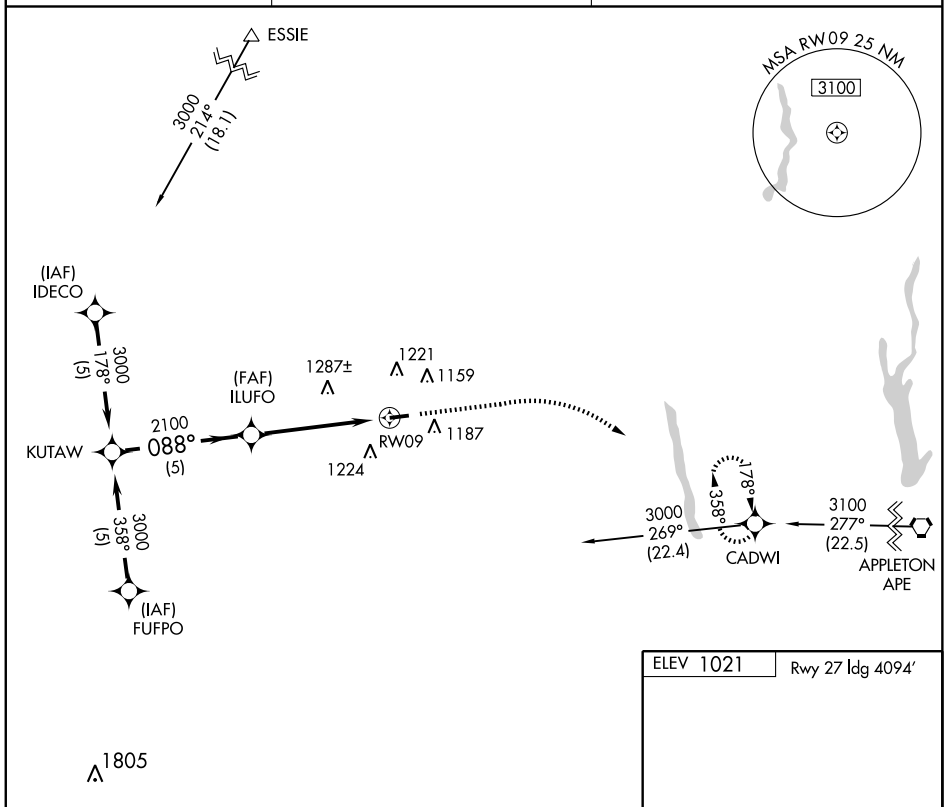
GPS RWY 9

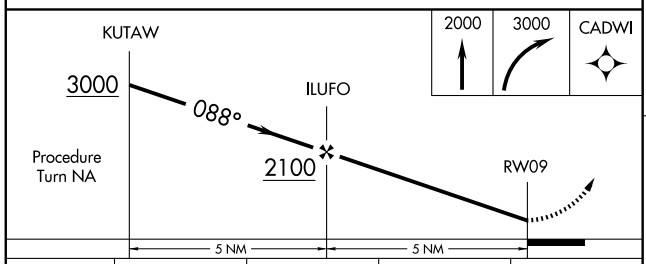
MARYSVILLE / UNION COUNTY (MRT)

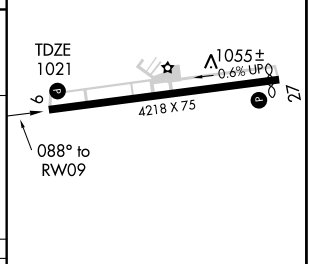
NA

MISSED APPROACH: Climb to 2000, then climbing right turn to 3000 direct CADWI WP and hold.

AWOS-3	COLUMBUS APP CON	UNICOM
119.275	120.2 317.775	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-9	1520-1 499 (500-1)		1520-1¼ 499 (500-1¼)	1520-1½ 499 (500-1½)
CIRCLING	1540-1 519 (600-1)		1560-1½ 539 (600-1½)	1580-2 559 (600-2)

MIRL Rwy 9-27 L
REIL Rwys 9 and 27 L

APP CRS	Rwy ldg	4094
268°	TDZE	1015
	Apt Elev	1021

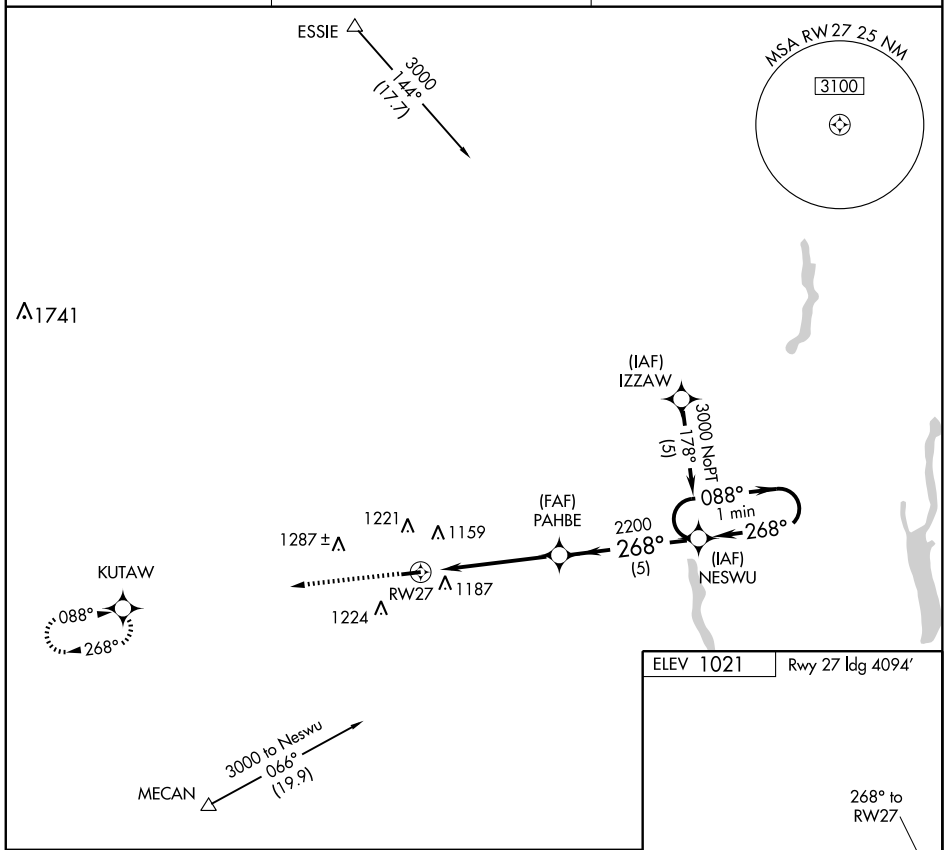
GPS RWY 27

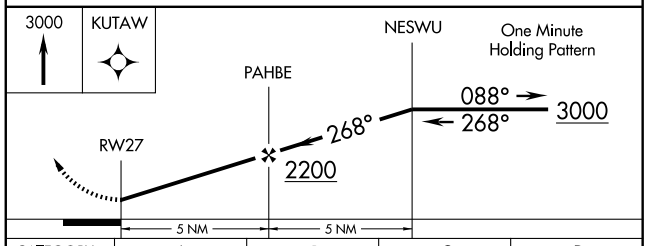
MARYSVILLE / UNION COUNTY (MRT)

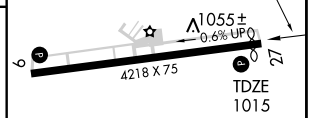
NA

MISSED APPROACH: Climb to 3000 direct KUTAW WP and hold.

AWOS-3	COLUMBUS APP CON	UNICOM
119.275	120.2 317.775	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-27	1520-1 505 (500-1)		1520-1½ 505 (500-1½)	
CIRCLING	1540-1 519 (600-1)		1560-1½ 539 (600-1½)	1580-2 559 (600-2)

MIRL Rwy 9-27 L
REIL Rwys 9 and 27 L

EC-2, 14 JAN 2010 to 11 FEB 2010

CLEVELAND DEP CON
125.35 354.025

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 1, 9, 19, 27: Climb via assigned heading to 3000 thence. . . .

. . . . or assigned altitude for radar vectors to HUDDZ, then via 267° track to AMRST, then via 324° track to ALPHE. Expect filed altitude/flight level ten (10) minutes after departure.

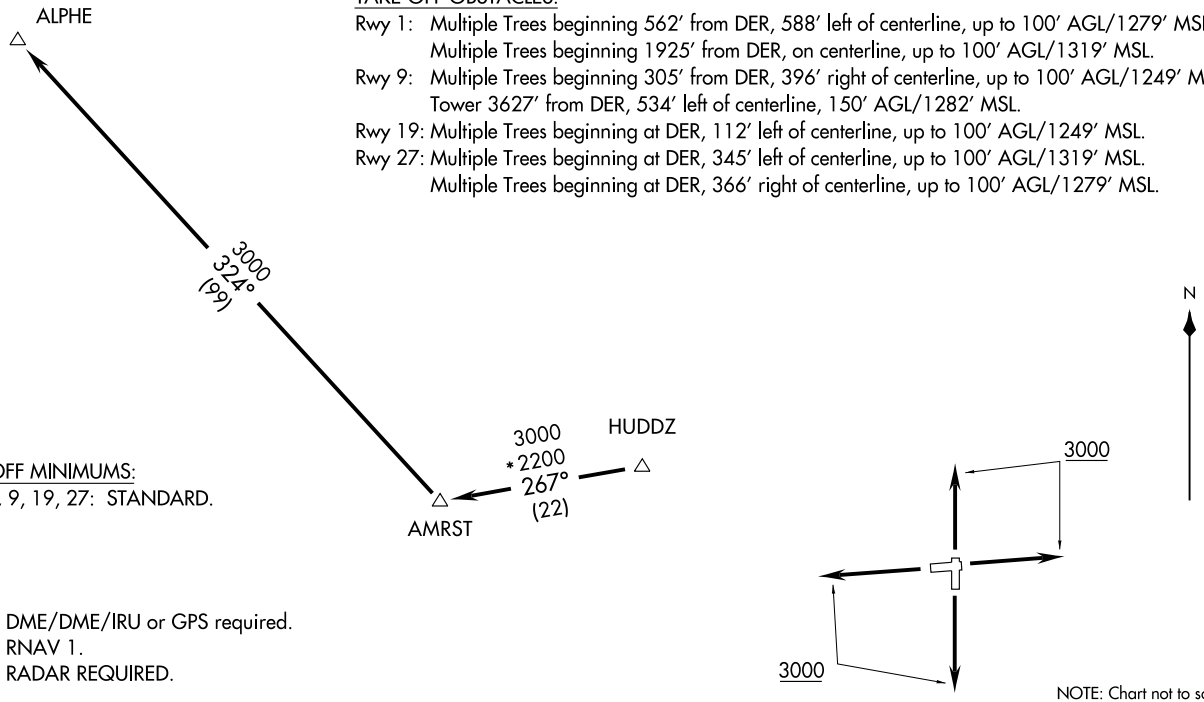
TAKE-OFF OBSTACLES:

Rwy 1: Multiple Trees beginning 562′ from DER, 588′ left of centerline, up to 100′ AGL/1279′ MSL.
Multiple Trees beginning 1925′ from DER, on centerline, up to 100′ AGL/1319′ MSL.

Rwy 9: Multiple Trees beginning 305′ from DER, 396′ right of centerline, up to 100′ AGL/1249′ MSL.
Tower 3627′ from DER, 534′ left of centerline, 150′ AGL/1282′ MSL.

Rwy 19: Multiple Trees beginning at DER, 112′ left of centerline, up to 100′ AGL/1249′ MSL.

Rwy 27: Multiple Trees beginning at DER, 345′ left of centerline, up to 100′ AGL/1319′ MSL.
Multiple Trees beginning at DER, 366′ right of centerline, up to 100′ AGL/1279′ MSL.



TAKE-OFF MINIMUMS:
Rwys 1, 9, 19, 27: STANDARD.

NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: RADAR REQUIRED.

NOTE: Chart not to scale.

(ALPHE2.ALPHE) 09127

ALPHE TWO DEPARTURE (RNAV)

SL-5763 (FAA)

MEDINA MUNI (1G5)
MEDINA, OHIO

CLEVELAND DEP CON
125.35 346.325

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 1, 9, 19, 27: Climb via assigned heading to 3000 thence. . . .

. . . . or assigned altitude for vectors to intercept the DJB VOR/DME R-265 to AMRST INT then via (Transition). Expect filed altitude/flight level ten (10) minutes after departure.

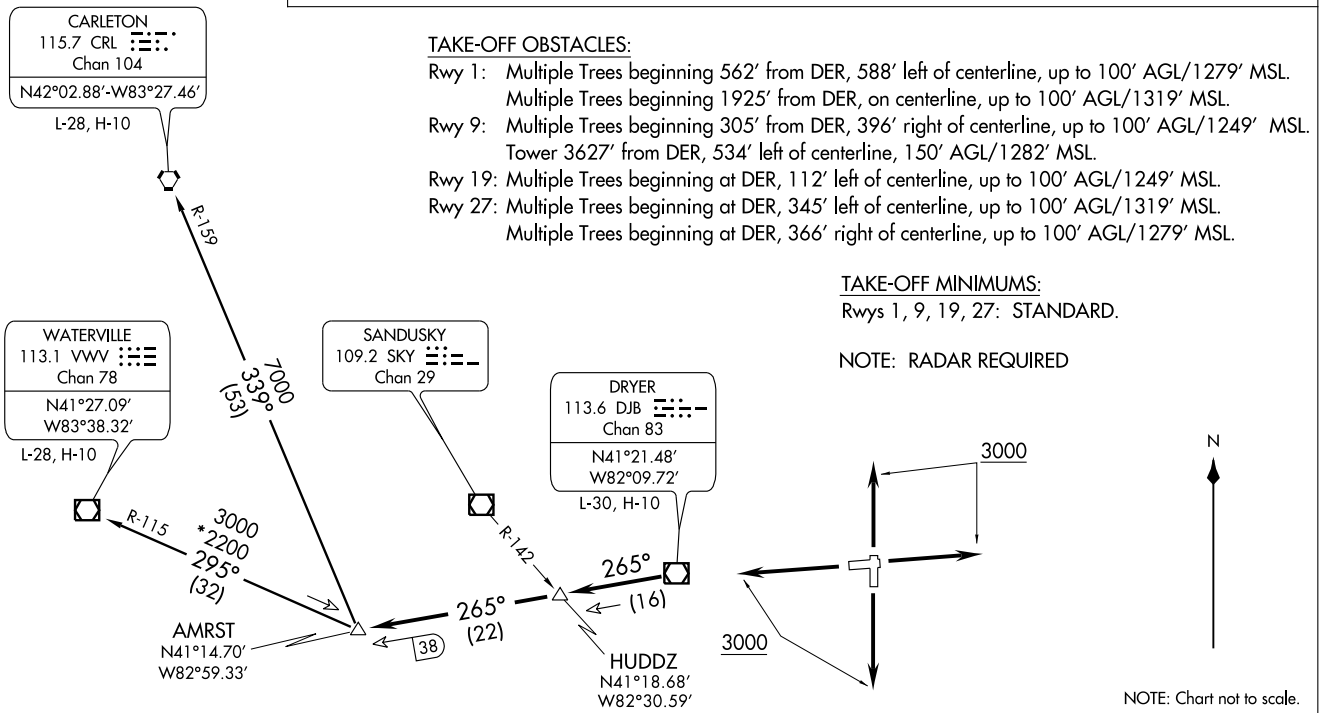
CARLETON TRANSITION (AMRST2.CRL): From over AMRST INT via CRL R-159 to CRL VORTAC.
WATERVILLE TRANSITION (AMRST2.VWV): From over AMRST INT via VWV R-115 to VWV VOR/DME.

TAKE-OFF OBSTACLES:

Rwy 1: Multiple Trees beginning 562′ from DER, 588′ left of centerline, up to 100′ AGL/1279′ MSL.
Multiple Trees beginning 1925′ from DER, on centerline, up to 100′ AGL/1319′ MSL.
Rwy 9: Multiple Trees beginning 305′ from DER, 396′ right of centerline, up to 100′ AGL/1249′ MSL.
Tower 3627′ from DER, 534′ left of centerline, 150′ AGL/1282′ MSL.
Rwy 19: Multiple Trees beginning at DER, 112′ left of centerline, up to 100′ AGL/1249′ MSL.
Rwy 27: Multiple Trees beginning at DER, 345′ left of centerline, up to 100′ AGL/1319′ MSL.
Multiple Trees beginning at DER, 366′ right of centerline, up to 100′ AGL/1279′ MSL.

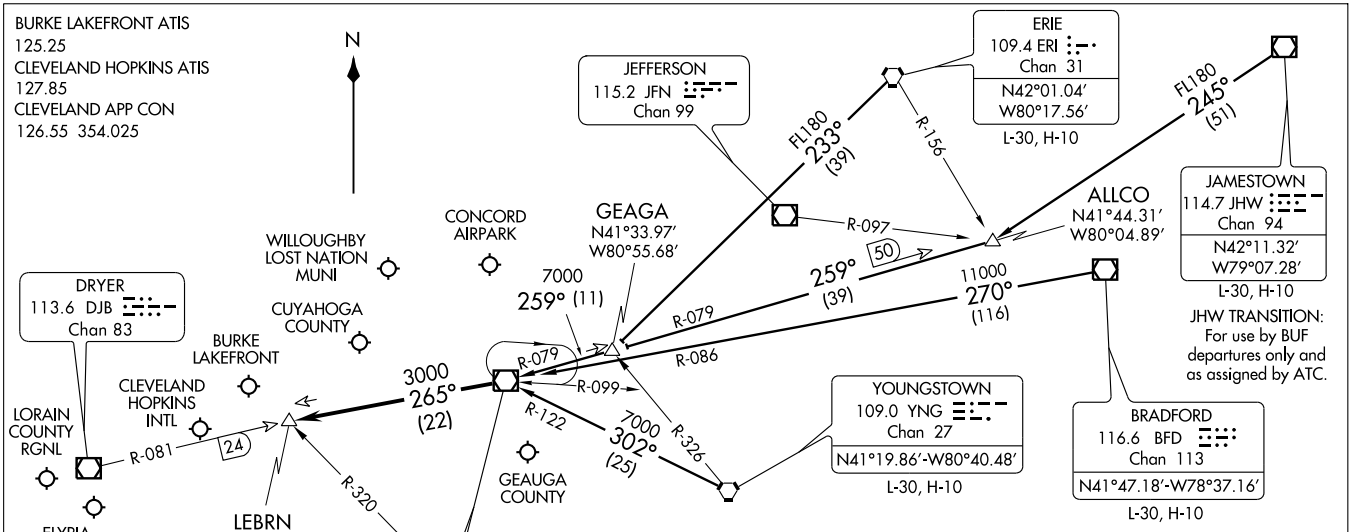
TAKE-OFF MINIMUMS:
Rwys 1, 9, 19, 27: STANDARD.

NOTE: RADAR REQUIRED



AMRST TWO DEPARTURE
(AMRST2.AMRST) 09183
SL-5763 (FAA)
MEDINA MUNI (1G5)
MEDINA, OHIO

CHARDON TWO ARRIVAL



VERTICAL NAVIGATION PLANNING INFORMATION

TURBOJETS: Expect clearance to cross at 10,000′ and 250 Kts.
PROPS: Expect clearance to cross at 9000′.

NOTE: RADAR Required.

NOTE: Chart not to scale.

ARRIVAL ROUTE DESCRIPTION

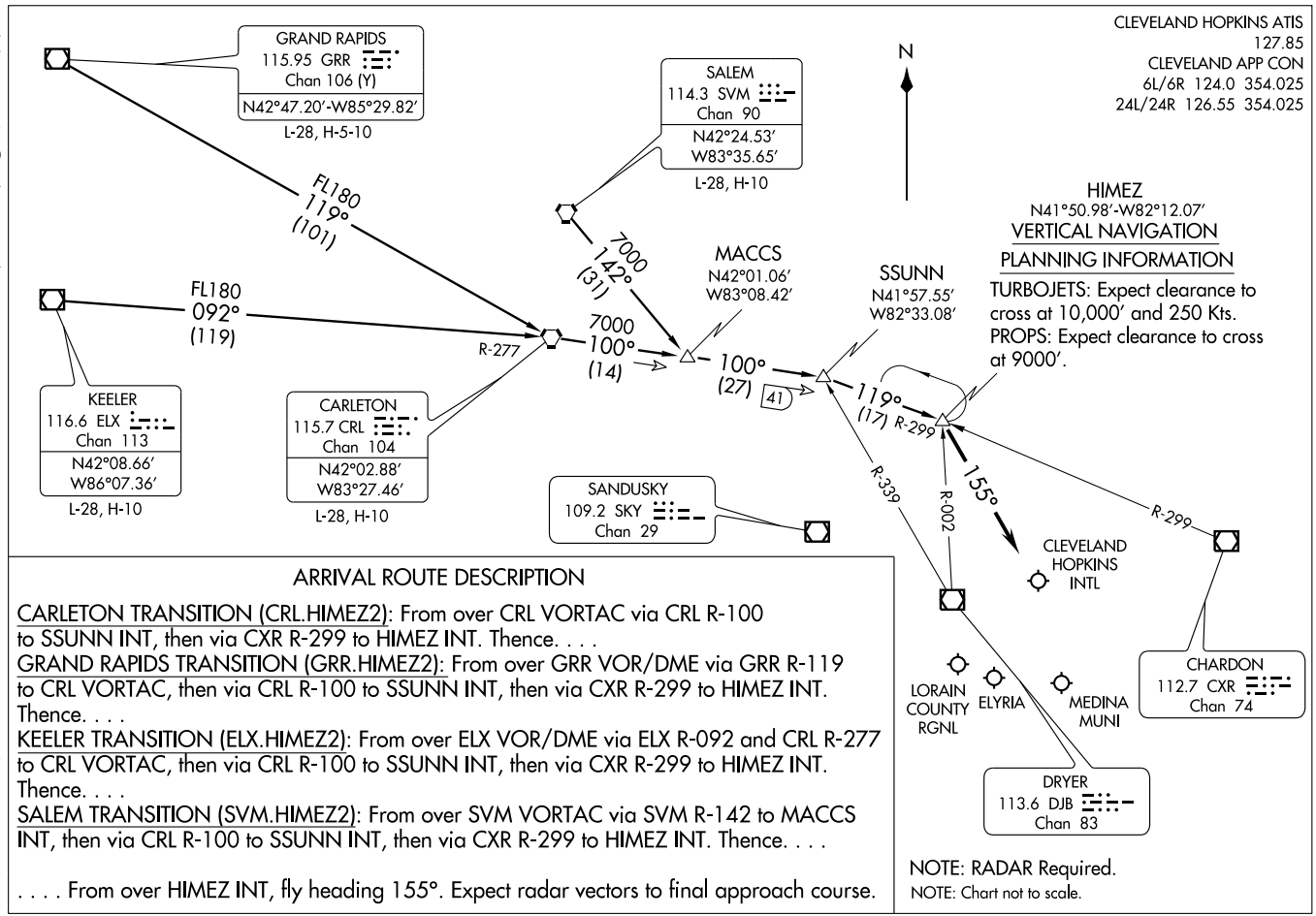
BRADFORD TRANSITION (BFD.CXR2): From over BFD VOR/DME via BFD R-270 and CXR R-086 to CXR VOR/DME. Thence . . . .

ERIE TRANSITION (ERI.CXR2): From over ERI VORTAC via ERI R-233 to GEAGA INT, then via CXR R-079 to CXR VOR/DME. Thence . . . .

JAMESTOWN TRANSITION (JHW.CXR2): (For use by BUF departures only and as assigned by ATC) From over JHW VOR/DME via JHW R-245 to ALLCO INT, then via CXR R-079 to CXR VOR/DME. Thence . . . .

YOUNGSTOWN TRANSITION (YNG.CXR2): From over YNG VORTAC via YNG R-302 and CXR R-122 to CXR VOR/DME. Thence . . . .

. . . . From CXR VOR/DME via R-265 to LEBRN INT, expect vectors to final approach course.



ARRIVAL ROUTE DESCRIPTION

CARLETON TRANSITION (CRL.HIMEZ2): From over CRL VORTAC via CRL R-100 to SSUNN INT, then via CXR R-299 to HIMEZ INT. Thence. . . .

GRAND RAPIDS TRANSITION (GRR.HIMEZ2): From over GRR VOR/DME via GRR R-119 to CRL VORTAC, then via CRL R-100 to SSUNN INT, then via CXR R-299 to HIMEZ INT. Thence. . . .

KEELER TRANSITION (ELX.HIMEZ2): From over ELX VOR/DME via ELX R-092 and CRL R-277 to CRL VORTAC, then via CRL R-100 to SSUNN INT, then via CXR R-299 to HIMEZ INT. Thence. . . .

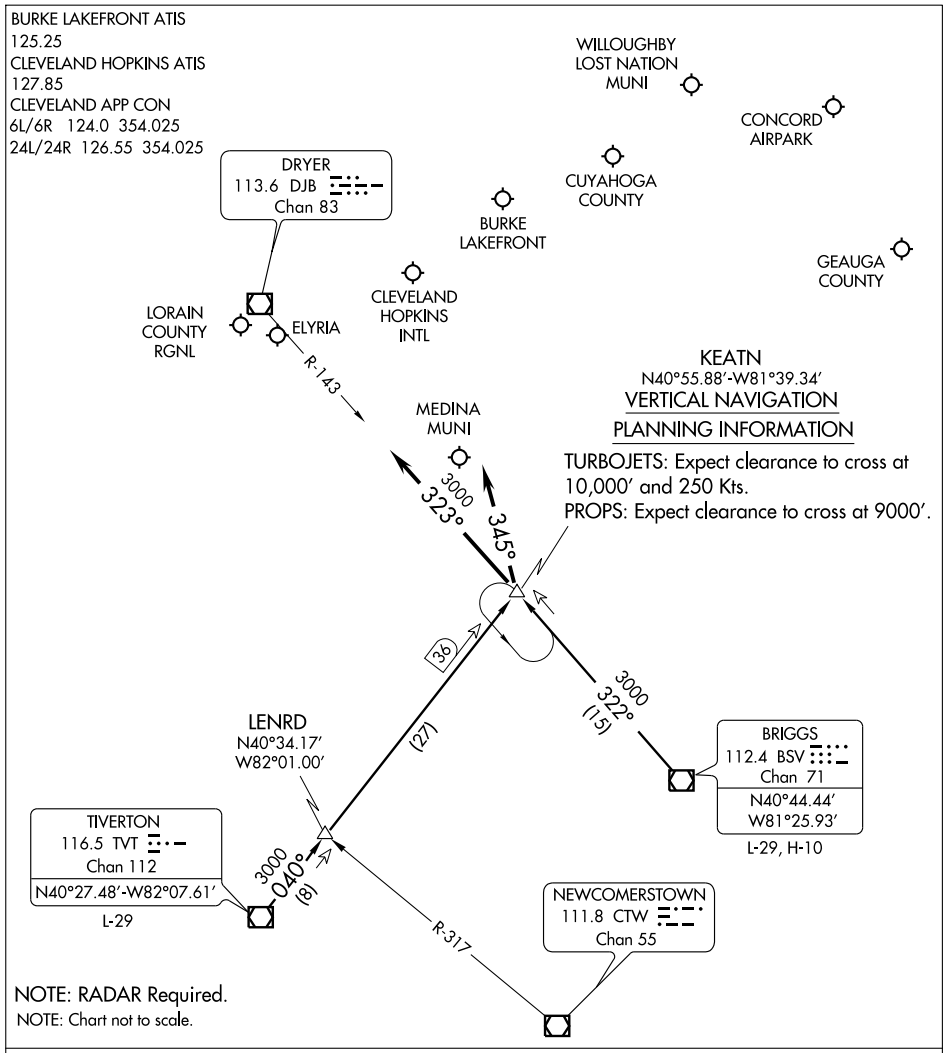
SALEM TRANSITION (SVM.HIMEZ2): From over SVM VORTAC via SVM R-142 to MACCS INT, then via CRL R-100 to SSUNN INT, then via CXR R-299 to HIMEZ INT. Thence. . . .

. . . . From over HIMEZ INT, fly heading 155°. Expect radar vectors to final approach course.

KEATN FOUR ARRIVAL

ST-84 (FAA)

CLEVELAND, OHIO



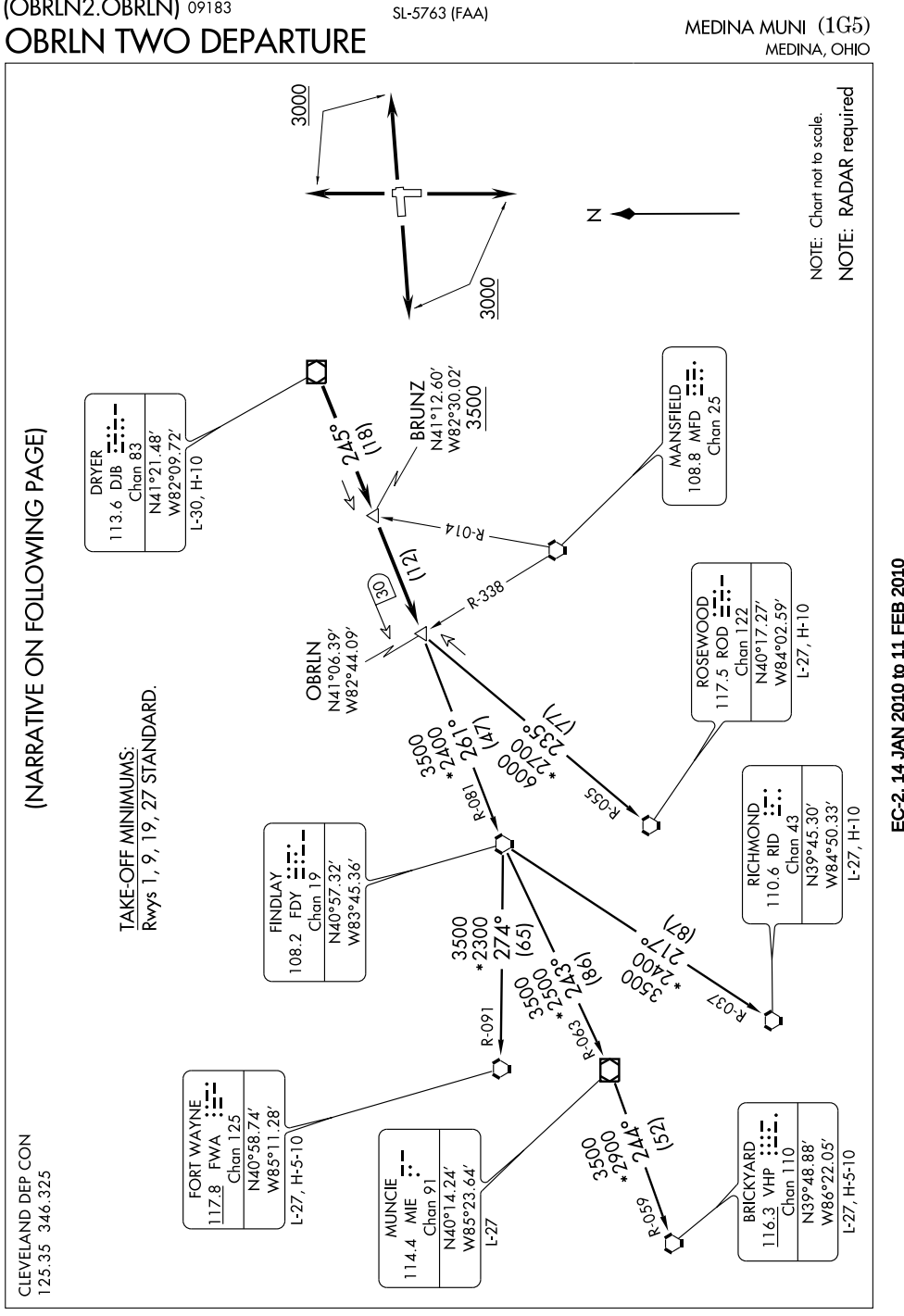
ARRIVAL ROUTE DESCRIPTION

BRIGGS TRANSITION (BSV.KEATN4): From over BSV VOR/DME via BSV R-322 to KEATN INT. Thence. . . .
TIVERTON TRANSITION (TVT.KEATN4): From over TVT VOR/DME via TVT R-040 to KEATN INT. Thence. . . .

LANDING CLE RWY 24L/R: . . . .Depart KEATN INT heading 345°. Expect radar vectors to final approach course.
LANDING CLE RWY 6L/R: . . . .Depart KEATN INT via DJB R-143 to DJB VOR/DME. Expect radar vectors to final approach course.
LANDING ALL OTHER AIRPORTS: . . . .From KEATN INT expect radar vectors to final approach course.

EC-2, 14 JAN 2010 to 11 FEB 2010

OBRLN TWO DEPARTURE



OBRLN TWO DEPARTURE

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 1, 9, 19, 27: Climb via assigned heading to 3000 thence. . . .

. . . . or assigned altitude for vectors to intercept DJB VOR/DME R-245, cross BRUNZ INT at or above 3500 then proceed to OBRLN INT then via (transition). Expect filed altitude/flight level ten (10) minutes after departure.

BRICKYARD TRANSITION (OBRLN2.VHP): From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-243 and MIE R-063 to MIE VOR/DME, then via MIE R-244 and VHP R-059 to VHP VORTAC.
FORT WAYNE TRANSITION (OBRLN2.FWA): (For use by Fort Wayne arrivals only and ATC use as assigned.) From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-274 and FWA R-091 to FWA VORTAC.
MUNCIE TRANSITION (OBRLN2.MIE): (For use by Indianapolis arrivals only and ATC use as assigned). From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-243 and MIE R-063 to MIE VOR/DME.
RICHMOND TRANSITION (OBRLN2.RID): From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-217 and RID R-037 to RID VORTAC.
ROSEWOOD TRANSITION (OBRLN2.ROD): (For use at or below FL220 only and ATC use as assigned). From over OBRLN INT via ROD R-055 to ROD VORTAC.

TAKE-OFF OBSTACLES:
Rwy 1: Multiple Trees beginning 562′ from DER, 588′ left of centerline, up to 100′ AGL/1279′ MSL.
Multiple Trees beginning 1925′ from DER, on centerline, up to 100′ AGL/1319′ MSL.
Rwy 9: Multiple Trees beginning 305′ from DER, 396′ right of centerline, up to 100′ AGL/1249′ MSL.
Tower 3627′ from DER, 534′ left of centerline, 150′ AGL/1282′ MSL.
Rwy 19: Multiple Trees beginning at DER, 112′ left of centerline, up to 100′ AGL/1249′ MSL.
Rwy 27: Multiple Trees beginning at DER, 345′ left of centerline, up to 100′ AGL/1319′ MSL.
Multiple Trees beginning at DER, 366′ right of centerline, up to 100′ AGL/1279′ MSL.

APP CRS	Rwy ldg	3556
091°	TDZE	1179
	Apt Elev	1190

RNAV (GPS) RWY 9
MEDINA MUNI (1G5)

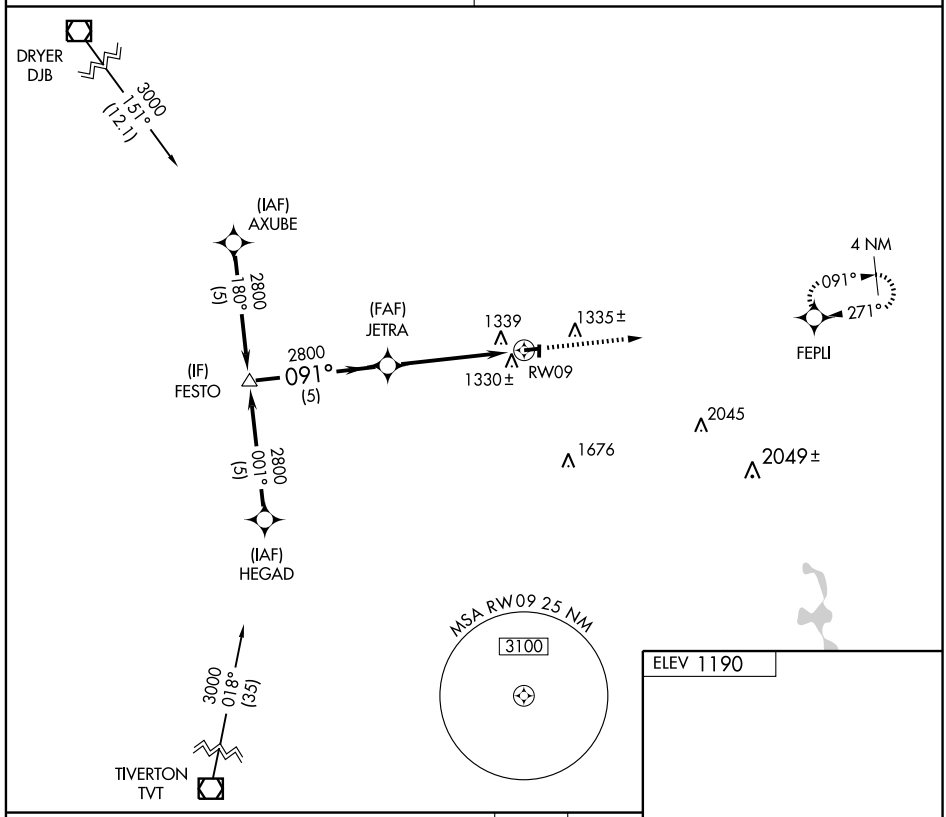
Use Cleveland-Hopkins altimeter setting.
DME/DME RNP-0.3 NA.

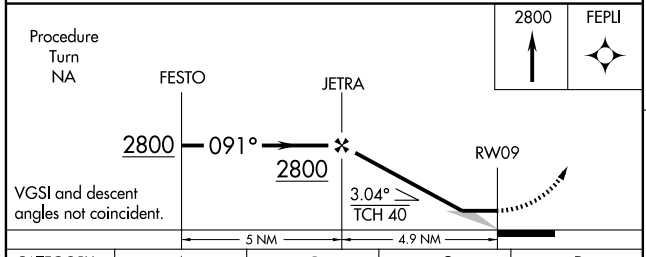
NA

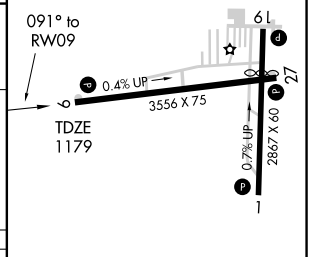
MISSED APPROACH: Climb to 2800 direct FEPLI WP and hold.

CLEVELAND APP CON
125.35 354.025

UNICOM
123.0 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	1700-1 521 (600-1)		1700-1½ 521 (600-1½)	NA
CIRCLING	1740-1 550 (600-1)		1740-1½ 550 (600-1½)	NA

REIL Rwy 27
MIRL Rwy 9-27, 1-19 L

EC-2, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	3556
271°	TDZE	1183
	Apt Elev	1190

RNAV (GPS) RWY 27
MEDINA MUNI (1G5)

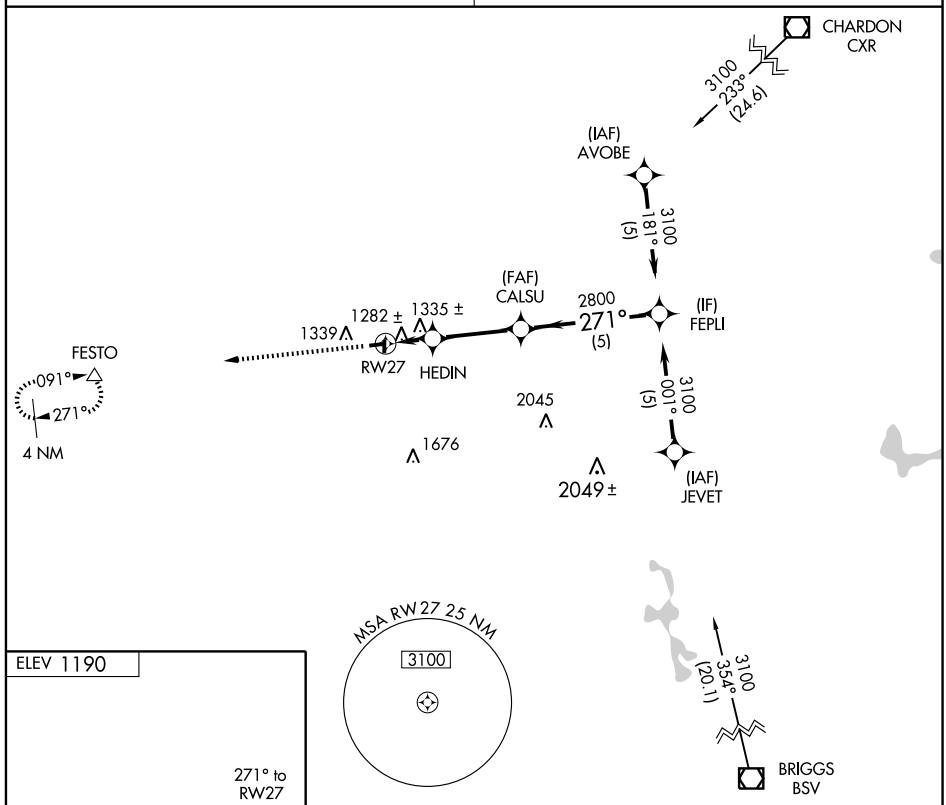
NA

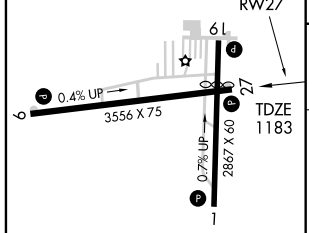
Use Cleveland Hopkins altimeter setting.
GPS or RNP-0.3 required.
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2800 direct FESTO WP and hold.

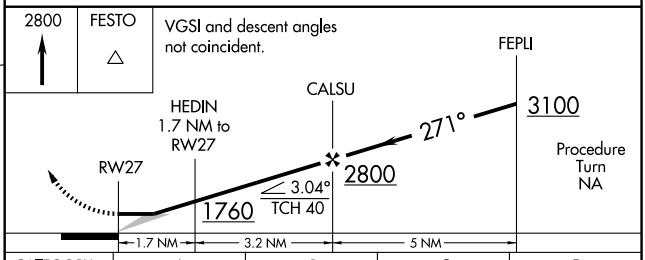
CLEVELAND APP CON
125.35 354.025

UNICOM
123.0 (CTAF) L





REIL Rwy 27
MIRL Rwy 9-27, 1-19 L



CATEGORY	A	B	C	D
LNAV MDA	1680-1 497 (500-1)		1680-1¼ 497 (500-1¼)	NA
CIRCLING	1740-1 550 (600-1)		1740-1½ 550 (600-1½)	NA

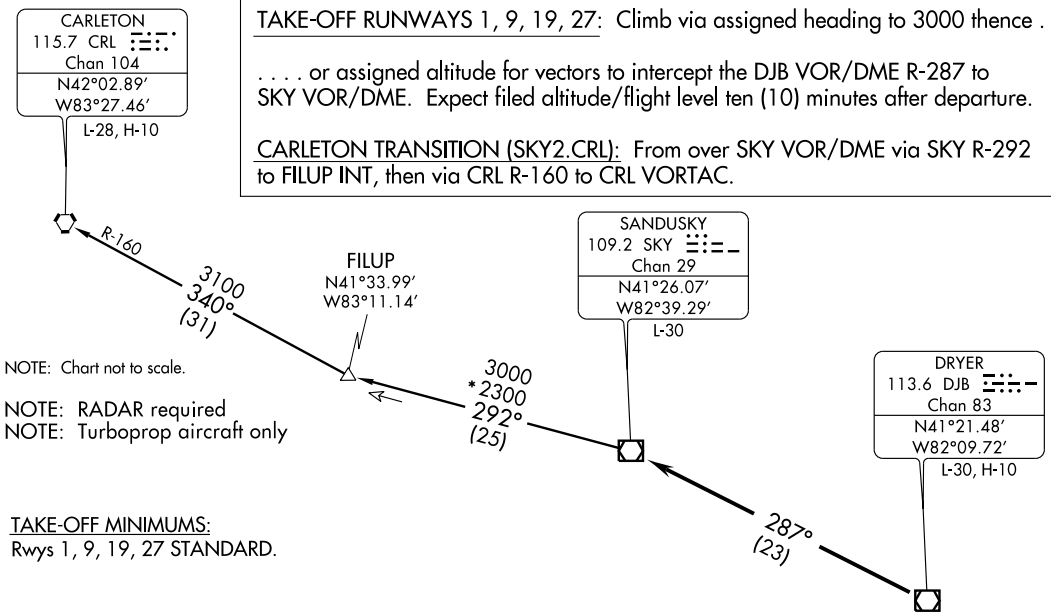
CLEVELAND DEP CON
125.35 346.325

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 1, 9, 19, 27: Climb via assigned heading to 3000 thence . . . .

. . . . or assigned altitude for vectors to intercept the DJB VOR/DME R-287 to SKY VOR/DME. Expect filed altitude/flight level ten (10) minutes after departure.

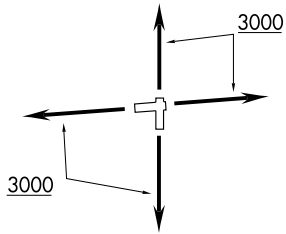
CARLETON TRANSITION (SKY2.CRL): From over SKY VOR/DME via SKY R-292 to FILUP INT, then via CRL R-160 to CRL VORTAC.



NOTE: Chart not to scale.

NOTE: RADAR required
NOTE: Turboprop aircraft only

TAKE-OFF MINIMUMS:
Rwys 1, 9, 19, 27 STANDARD.



TAKE-OFF OBSTACLES:

Rwy 1: Multiple Trees beginning 562′ from DER, 588′ left of centerline, up to 100′ AGL/1279′ MSL.
Multiple Trees beginning 1925′ from DER, on centerline, up to 100′ AGL/1319′ MSL.

Rwy 9: Multiple Trees beginning 305′ from DER, 396′ right of centerline, up to 100′ AGL/1249′ MSL.
Tower 3627′ from DER, 534′ left of centerline, 150′ AGL/1282′ MSL.

Rwy 19: Multiple Trees beginning at DER, 112′ left of centerline, up to 100′ AGL/1249′ MSL.

Rwy 27: Multiple Trees beginning at DER, 345′ left of centerline, up to 100′ AGL/1319′ MSL.
Multiple Trees beginning at DER, 366′ right of centerline, up to 100′ AGL/1279′ MSL.

VOR/DME ACO 114.4 Chan 91	APP CRS 278°	Rwy ldg 3556 TDZE 1183 Apt Elev 1190

VOR RWY 27
MEDINA MUNI (1G5)

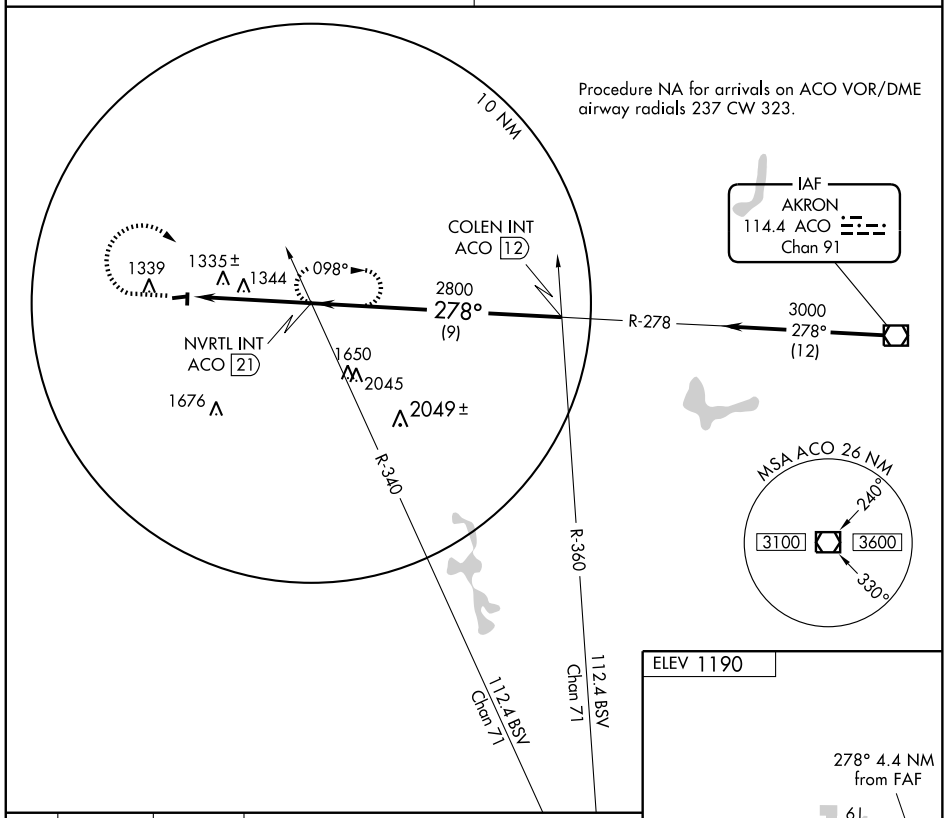
NA

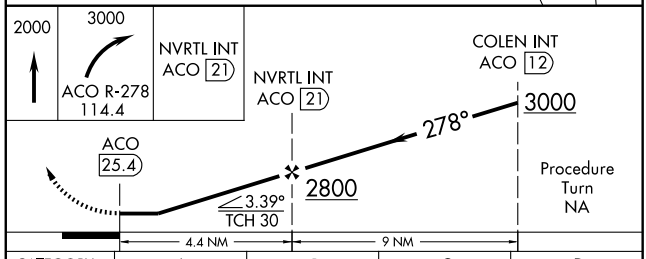
Use Cleveland-Hopkins Intl altimeter setting.

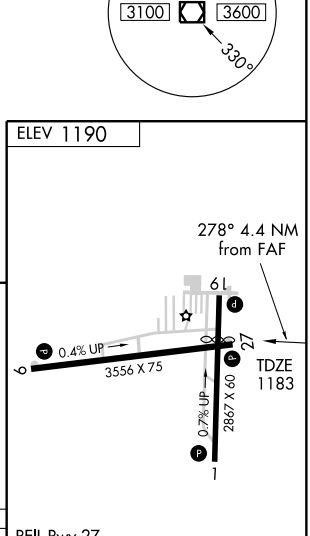
MISSED APPROACH: Climb to 2000 then climbing right turn to 3000 via ACO R-278 to NVRTL Int/21 DME and hold, continue climb-in-hold to 3000.

CLEVELAND APP CON
125.35 354.025

UNICOM
123.0 (CTAF) L







REIL Rwy 27
MIRL Rwy 9-27, 1-19 L

CATEGORY	A	B	C	D
S-27	1760-1 577 (600-1)	1760-1¼ 577 (600-1¼)	1760-1½ 577 (600-1½)	NA
CIRCLING	1800-1 610 (700-1)	1800-1¼ 610 (700-1¼)	1800-1¾ 610 (700-1¾)	NA

FAF to MAP 4.4 NM

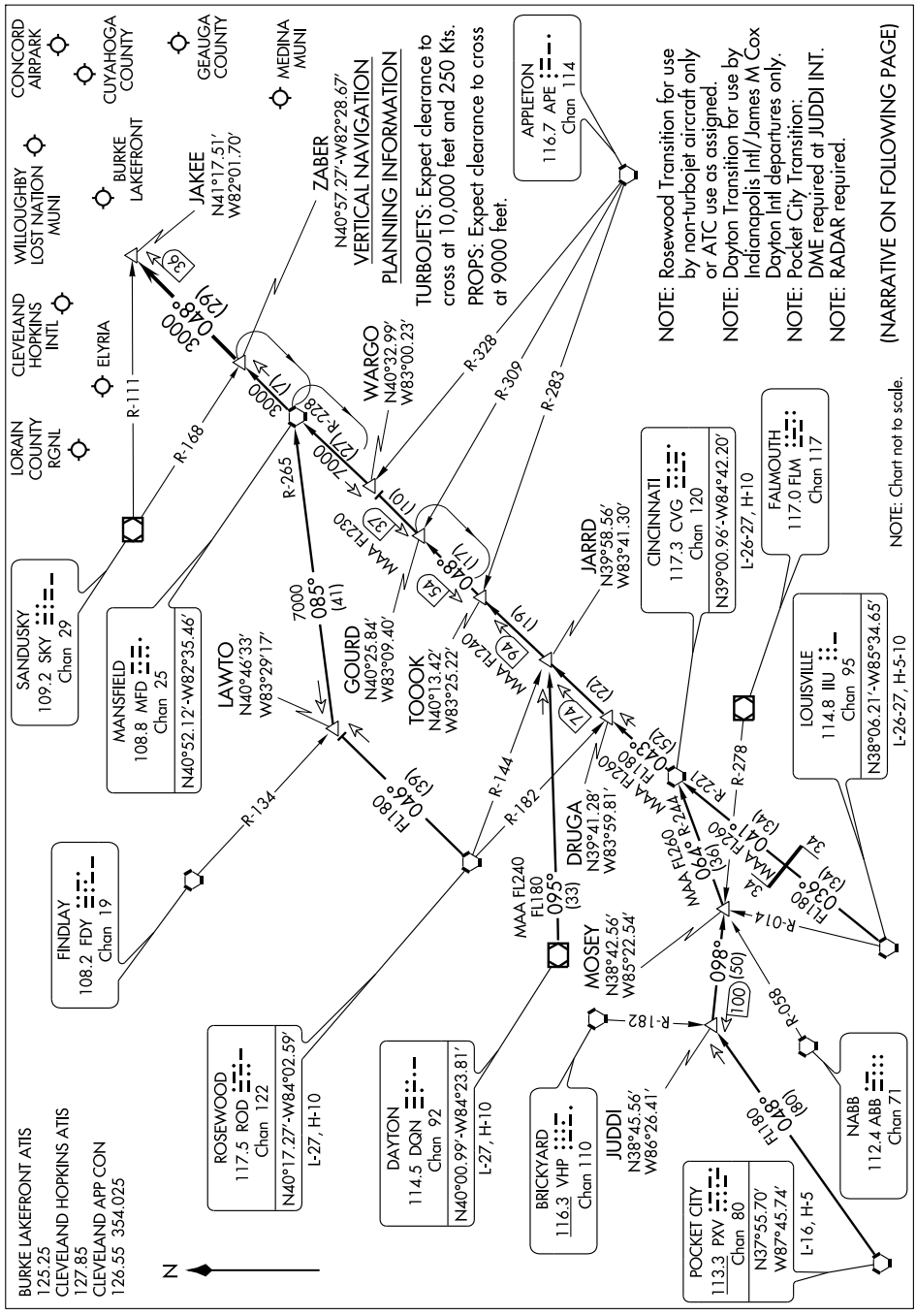
Knots	60	90	120	150	180
Min:Sec	4:24	2:56	2:12	1:46	1:28

EC-2, 14 JAN 2010 to 11 FEB 2010

ZABER ONE ARRIVAL

ST-84 (FAA)

CLEVELAND, OHIO



ARRIVAL ROUTE DESCRIPTION

CINCINNATI TRANSITION (CVG.ZABER1): From over CVG VORTAC via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

DAYTON TRANSITION (DQN.ZABER1): (For use by INDIANAPOLIS INTL/JAMES M COX DAYTON INTL departures only). From over DQN VOR/DME via DQN R-095 to JARRD INT, then via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

LOUISVILLE TRANSITION (IIU.ZABER1): From over IIU VORTAC via IIU R-036 and CVG R-221 to CVG VORTAC, then via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

POCKET CITY TRANSITION (PXV.ZABER1): (DME REQUIRED at JUDDI INT) From over PXV VORTAC via PXV R-048 to JUDDI INT, then via FLM R-278 to MOSEY INT, then via CVG R-244 to CVG VORTAC, then via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

ROSEWOOD TRANSITION (ROD.ZABER1): (For use by non-turbo aircraft only or ATC use as assigned). From over ROD VORTAC via ROD R-046 to LAWTO INT, then via MFD R-265 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

. . . . From over ZABER INT via MFD R-048 to JAKEE INT. Expect radar vectors to final approach course.

EC-2, 14 JAN 2010 to 11 FEB 2010

CLEVELAND DEP CON
125.35 346.32

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 11, 29: Climb via assigned heading to 3000 thence. . . .

. . . . or assigned altitude for radar vectors to HUDDZ, then via 267° track to AMRST, then via 324° track to ALPHE. Expect filed altitude/flight level ten (10) minutes after departure.

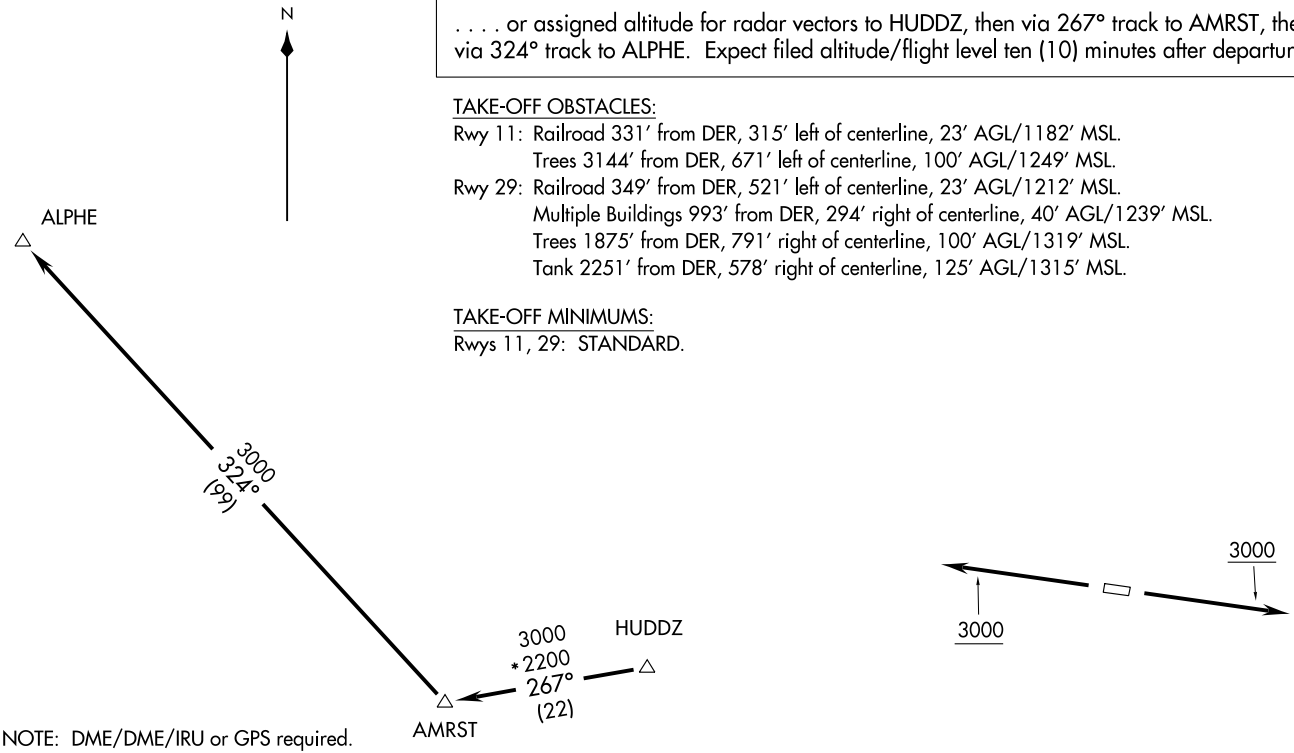
TAKE-OFF OBSTACLES:

Rwy 11: Railroad 331′ from DER, 315′ left of centerline, 23′ AGL/1182′ MSL.
Trees 3144′ from DER, 671′ left of centerline, 100′ AGL/1249′ MSL.

Rwy 29: Railroad 349′ from DER, 521′ left of centerline, 23′ AGL/1212′ MSL.
Multiple Buildings 993′ from DER, 294′ right of centerline, 40′ AGL/1239′ MSL.
Trees 1875′ from DER, 791′ right of centerline, 100′ AGL/1319′ MSL.
Tank 2251′ from DER, 578′ right of centerline, 125′ AGL/1315′ MSL.

TAKE-OFF MINIMUMS:

Rwys 11, 29: STANDARD.



NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: RADAR REQUIRED.

NOTE: Chart not to scale.

ALPHE TWO DEPARTURE (RNAV)

(ALPHE2.ALPHE) 09183

SL-6254 (FAA)

MIDDLEFIELD / GEAUGA COUNTY (7G8)
MIDDLEFIELD, OHIO

CLEVELAND DEP CON
125.35 346.325

TAKE-OFF MINIMUMS:
Rwys 11, 29: STANDARD.

NOTE: RADAR REQUIRED

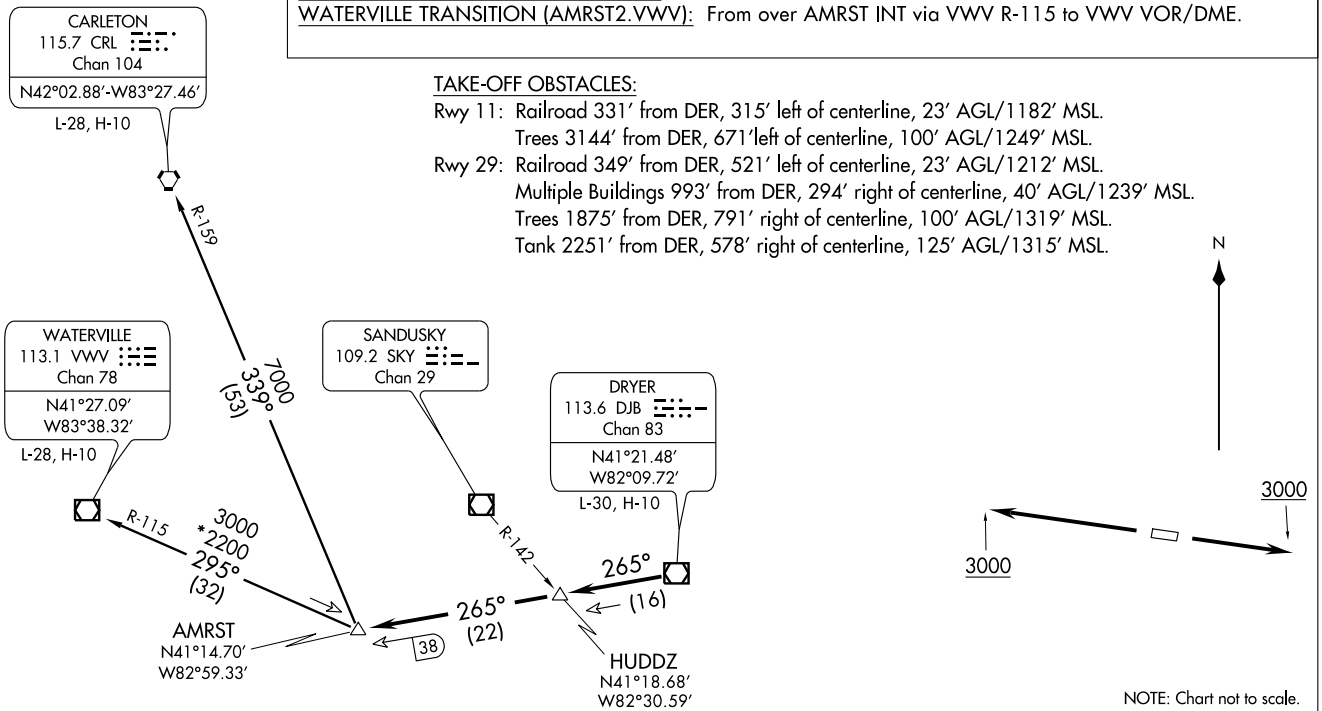
DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 11, 29: Climb via assigned heading to 3000 thence. . . .

. . . . or assigned altitude for vectors to intercept the DJB VOR/DME R-265 to AMRST INT then via (Transition). Expect filed altitude/flight level ten (10) minutes after departure.

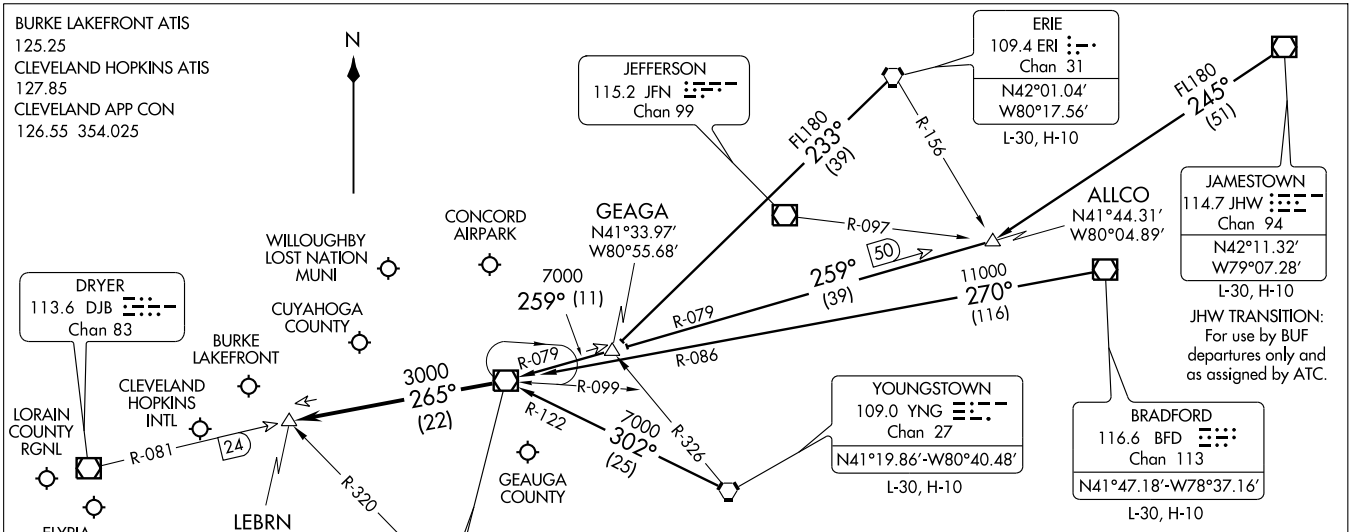
CARLETON TRANSITION (AMRST2.CRL): From over AMRST INT via CRL R-159 to CRL VORTAC.
WATERVILLE TRANSITION (AMRST2.VWV): From over AMRST INT via VWV R-115 to VWV VOR/DME.

TAKE-OFF OBSTACLES:
Rwy 11: Railroad 331′ from DER, 315′ left of centerline, 23′ AGL/1182′ MSL.
Trees 3144′ from DER, 671′left of centerline, 100′ AGL/1249′ MSL.
Rwy 29: Railroad 349′ from DER, 521′ left of centerline, 23′ AGL/1212′ MSL.
Multiple Buildings 993′ from DER, 294′ right of centerline, 40′ AGL/1239′ MSL.
Trees 1875′ from DER, 791′ right of centerline, 100′ AGL/1319′ MSL.
Tank 2251′ from DER, 578′ right of centerline, 125′ AGL/1315′ MSL.



AMRST TWO DEPARTURE
(AMRST2.AMRST) 09183
SL-6254 (FAA)
MIDDLEFIELD / GEAUGA COUNTY (7G8)
MIDDLEFIELD, OHIO

CHARDON TWO ARRIVAL



VERTICAL NAVIGATION PLANNING INFORMATION

TURBOJETS: Expect clearance to cross at 10,000′ and 250 Kts.
PROPS: Expect clearance to cross at 9000′.

NOTE: RADAR Required.

NOTE: Chart not to scale.

ARRIVAL ROUTE DESCRIPTION

BRADFORD TRANSITION (BFD.CXR2): From over BFD VOR/DME via BFD R-270 and CXR R-086 to CXR VOR/DME. Thence . . . .

ERIE TRANSITION (ERI.CXR2): From over ERI VORTAC via ERI R-233 to GEAGA INT, then via CXR R-079 to CXR VOR/DME. Thence . . . .

JAMESTOWN TRANSITION (JHW.CXR2): (For use by BUF departures only and as assigned by ATC) From over JHW VOR/DME via JHW R-245 to ALLCO INT, then via CXR R-079 to CXR VOR/DME. Thence . . . .

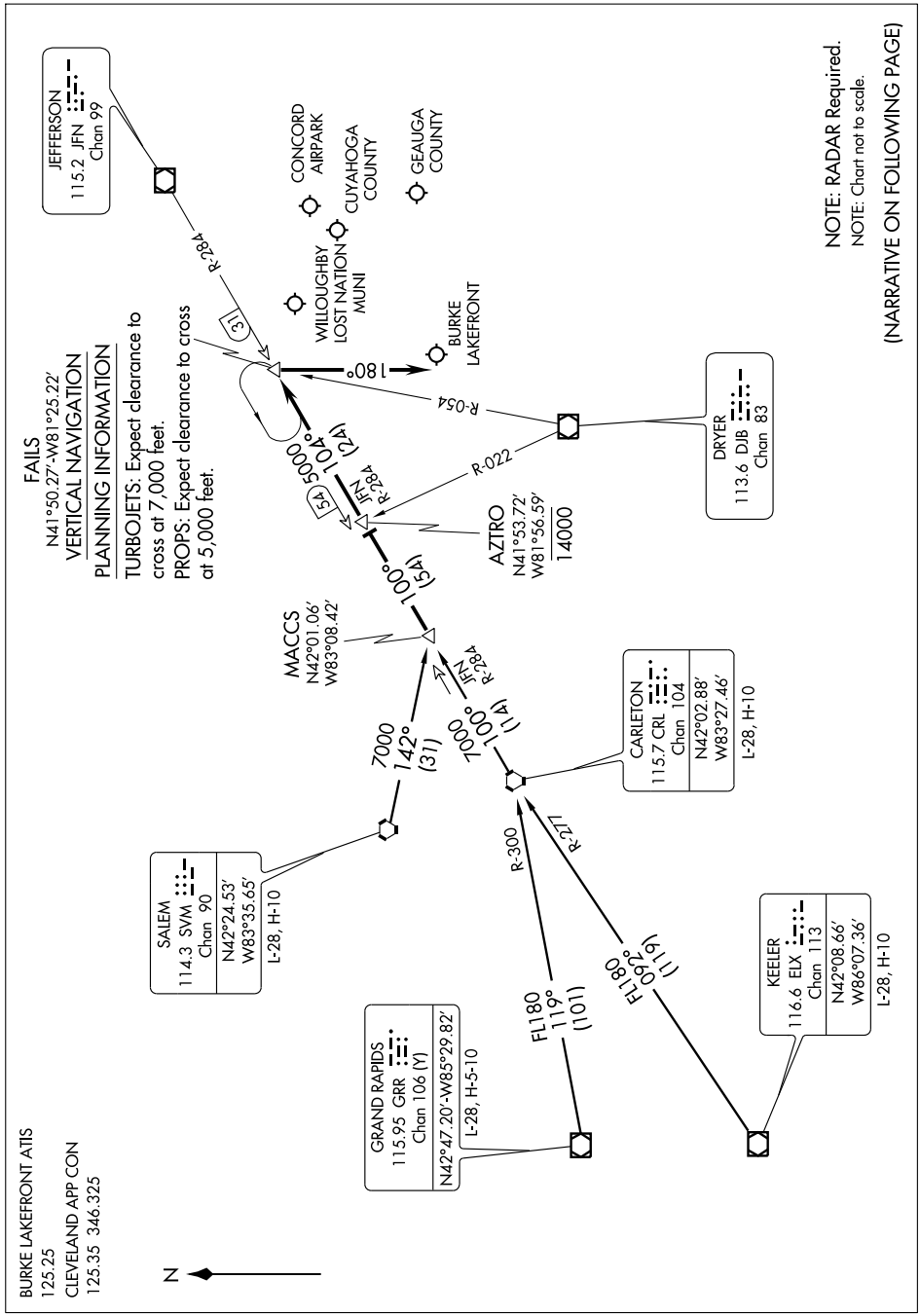
YOUNGSTOWN TRANSITION (YNG.CXR2): From over YNG VORTAC via YNG R-302 and CXR R-122 to CXR VOR/DME. Thence . . . .

. . . . From CXR VOR/DME via R-265 to LEBRN INT, expect vectors to final approach course.

FAILS ONE ARRIVAL

ST-5370 (FAA)

CLEVELAND, OHIO



ARRIVAL ROUTE DESCRIPTION

CARLETON TRANSITION (CRL.FAILS1): From over CRL VORTAC via CRL R-100 and JFN R-284 to MACCS INT. Thence. . . .
GRAND RAPIDS TRANSITION (GRR.FAILS1): From over GRR VOR/DME via GRR R-119 and CRL R-300 to CRL VORTAC, then via CRL R-100 and JFN R-284 to MACCS INT. Thence. . . .
KEELER TRANSITION (ELX.FAILS1): From over ELX VOR/DME via ELX R-092 and CRL R-277 to CRL VORTAC, then via CRL R-100 and JFN R-284 to MACCS INT. Thence. . . .
SALEM TRANSITION (SVM.FAILS1): From over SVM VORTAC via heading 142° to MACCS INT. Thence. . . .

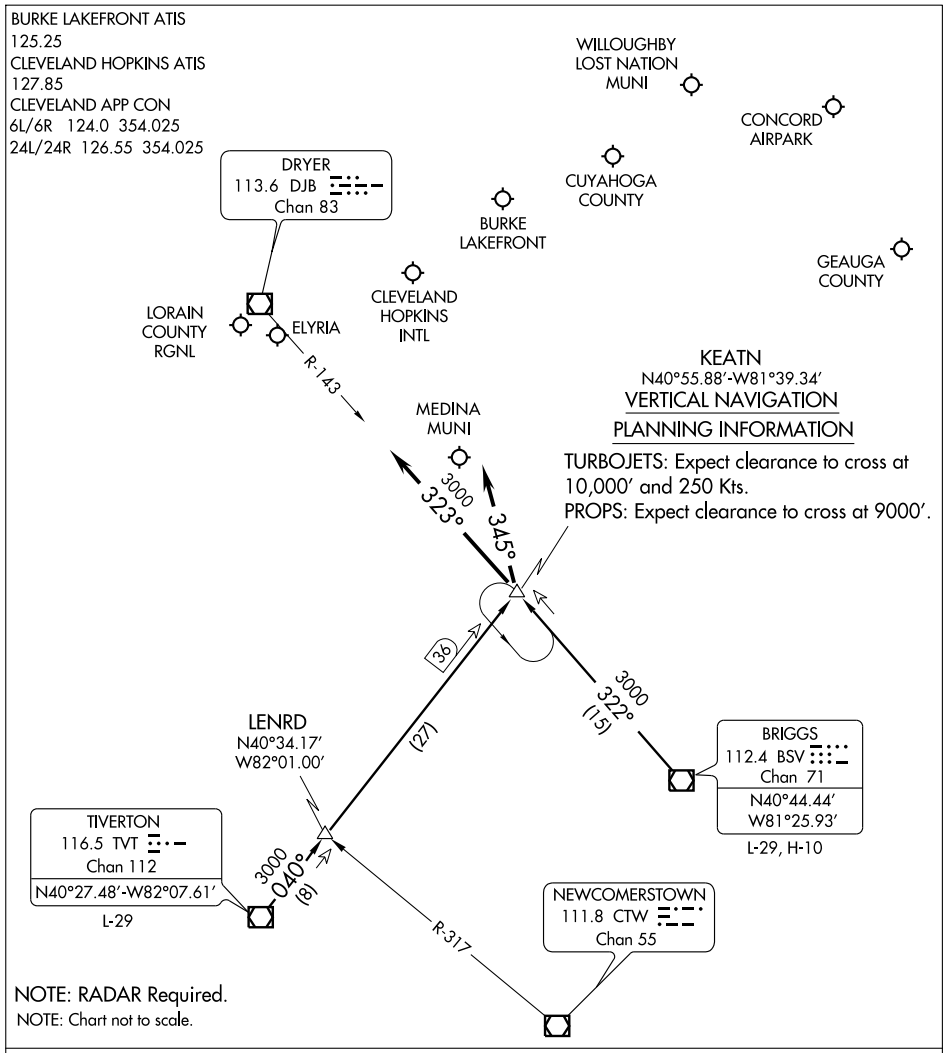
. . . . From over MACCS INT, via CRL VORTAC R-100 to AZTRO INT, then via JFN VOR/DME R-284 to FAILS INT. From FAILS fly heading 180°.
Expect radar vectors to final approach course.

EC-2, 14 JAN 2010 to 11 FEB 2010

KEATN FOUR ARRIVAL

ST-84 (FAA)

CLEVELAND, OHIO



ARRIVAL ROUTE DESCRIPTION

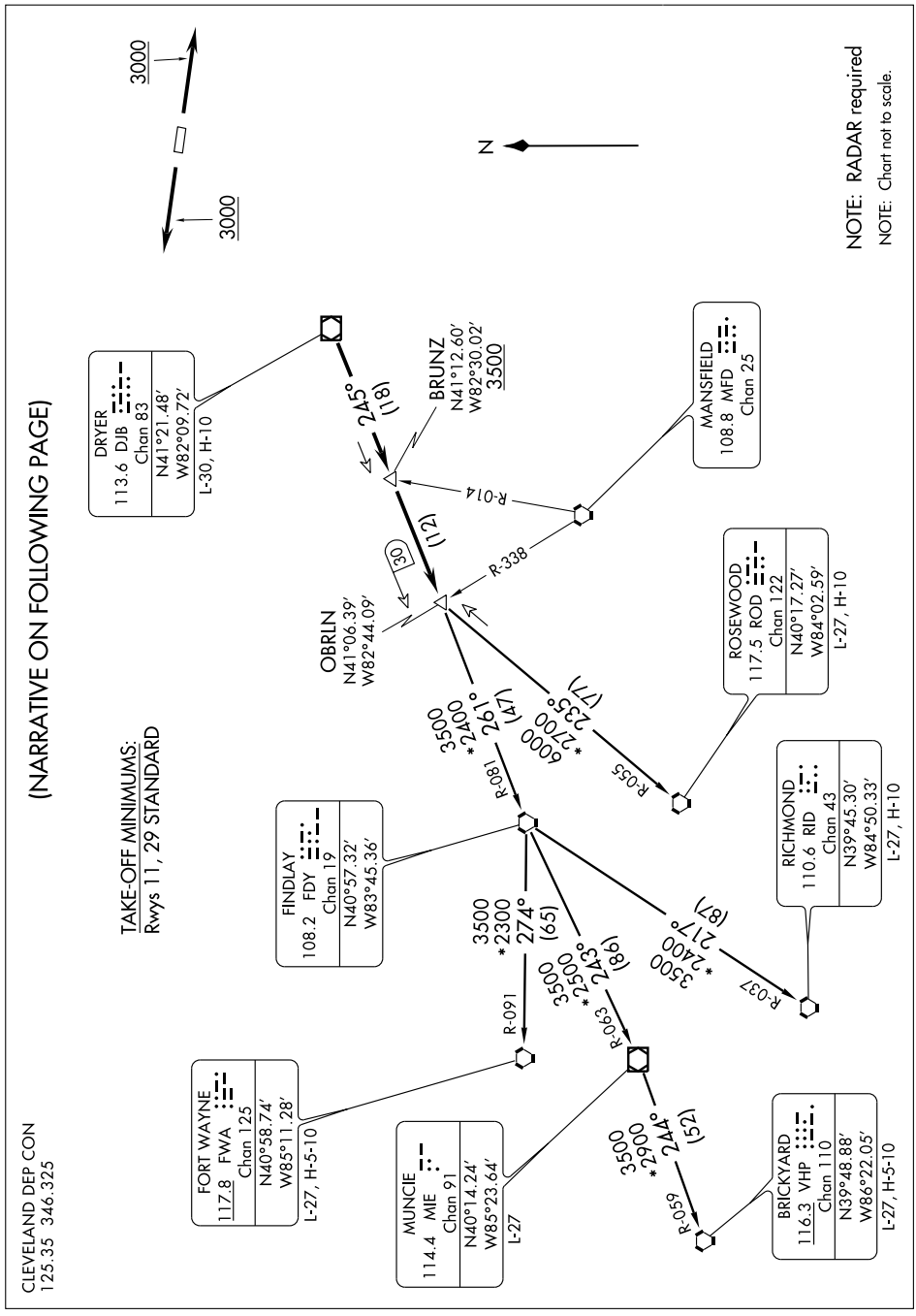
BRIGGS TRANSITION (BSV.KEATN4): From over BSV VOR/DME via BSV R-322 to KEATN INT. Thence. . . .
TIVERTON TRANSITION (TVT.KEATN4): From over TVT VOR/DME via TVT R-040 to KEATN INT. Thence. . . .

LANDING CLE RWY 24L/R: . . . .Depart KEATN INT heading 345°. Expect radar vectors to final approach course.
LANDING CLE RWY 6L/R: . . . .Depart KEATN INT via DJB R-143 to DJB VOR/DME. Expect radar vectors to final approach course.
LANDING ALL OTHER AIRPORTS: . . . .From KEATN INT expect radar vectors to final approach course.

EC-2, 14 JAN 2010 to 11 FEB 2010

OBRLN TWO DEPARTURE

MIDDLEFIELD / GEAUGA COUNTY (7G8)
MIDDLEFIELD, OHIO



OBRLN TWO DEPARTURE

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 11, 29: Climb via assigned heading to 3000 thence. . .

. . . or assigned altitude for vectors to intercept DJB VOR/DME R-245, cross BRUNZ INT at or above 3500 then proceed to OBRLN INT then via (transition). Expect filed altitude/flight level ten (10) minutes after departure.

BRICKYARD TRANSITION (OBRLN2.VHP): From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-243 and MIE R-063 to MIE VOR/DME, then via MIE R-244 and VHP R-059 to VHP VORTAC.
FORT WAYNE TRANSITION (OBRLN2.FWA): (For use by Fort Wayne arrivals only and ATC use as assigned.) From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-274 and FWA R-091 to FWA VORTAC.
MUNCIE TRANSITION (OBRLN2.MIE): (For use by Indianapolis arrivals only and ATC use as assigned). From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-243 and MIE R-063 to MIE VOR/DME.
RICHMOND TRANSITION (OBRLN2.RID): From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-217 and RID R-037 to RID VORTAC.
ROSEWOOD TRANSITION (OBRLN2.ROD): (For use at or below FL220 only and ATC use as assigned). From over OBRLN INT via ROD R-055 to ROD VORTAC.

TAKE-OFF OBSTACLES:
Rwy 11: Railroad 331′ from DER, 315′ left of centerline, 23′ AGL/1182′ MSL.
Trees 3144′ from DER, 671′ left of centerline, 100′ AGL/1249′ MSL.
Rwy 29: Railroad 349′ from DER, 521′ left of centerline, 23′ AGL/1212′ MSL.
Multiple Buildings 993′ from DER, 294′ right of centerline, 40′ AGL/1239′ MSL.
Trees 1875′ from DER, 791′ right of centerline, 100′ AGL/1319′ MSL.
Tank 2251′ from DER, 578′ right of centerline, 125′ AGL/1315′ MSL.

EC-2, 14 JAN 2010 to 11 FEB 2010

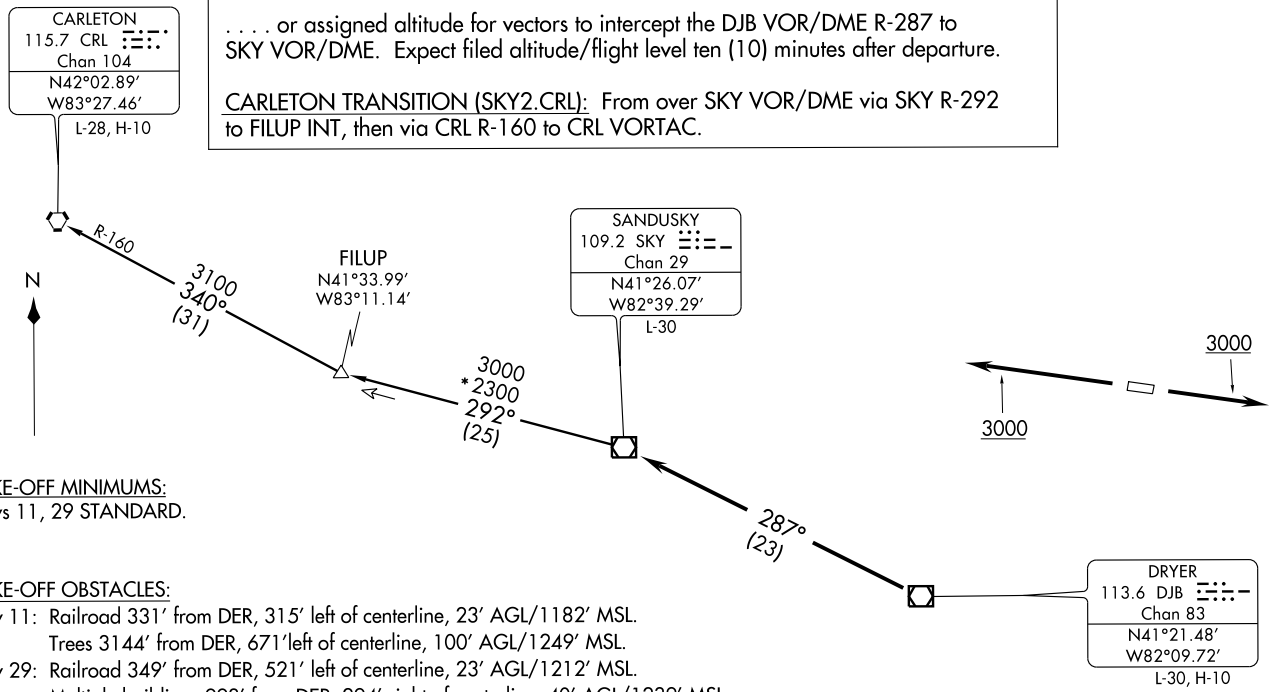
CLEVELAND DEP CON
125.35 346.325

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 11, 29: Climb via assigned heading to 3000 thence . . . .

. . . . or assigned altitude for vectors to intercept the DJB VOR/DME R-287 to SKY VOR/DME. Expect filed altitude/flight level ten (10) minutes after departure.

CARLETON TRANSITION (SKY2.CRL): From over SKY VOR/DME via SKY R-292 to FILUP INT, then via CRL R-160 to CRL VORTAC.



TAKE-OFF MINIMUMS:
Rwys 11, 29 STANDARD.

TAKE-OFF OBSTACLES:
Rwy 11: Railroad 331′ from DER, 315′ left of centerline, 23′ AGL/1182′ MSL.
Trees 3144′ from DER, 671′left of centerline, 100′ AGL/1249′ MSL.
Rwy 29: Railroad 349′ from DER, 521′ left of centerline, 23′ AGL/1212′ MSL.
Multiple buildings 993′ from DER, 294′ right of centerline, 40′ AGL/1239′ MSL.
Trees 1875′ from DER, 791′ right of centerline, 100′ AGL/1319′ MSL.
Tank 2251′ from DER, 578′ right of centerline, 125′ AGL/1315′ MSL.

NOTE: RADAR required
NOTE: Turboprop aircraft only

NOTE: Chart not to scale.

VOR/DME CXR	APP CRS	Rwy ldg	N/A
112.7	137°	TDZE	N/A
Chan 74		Apt Elev	1175

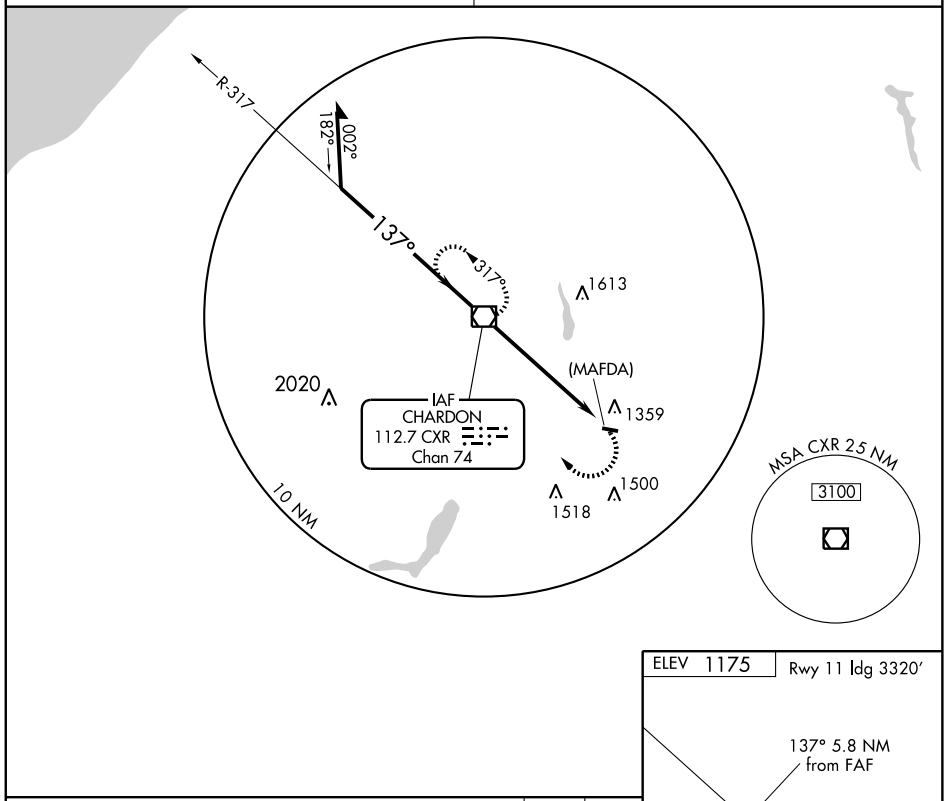
VOR or GPS-A

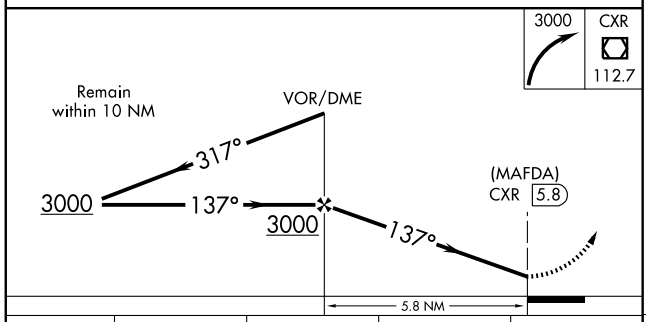
MIDDLEFIELD/ GEAUGA COUNTY (7G8)

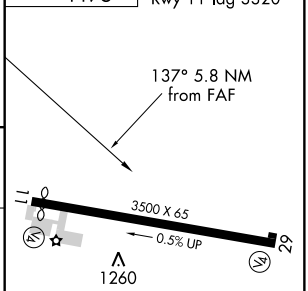
Use Youngstown-Warren Rgnl altimeter setting.
NA

MISSED APPROACH: Climbing right turn to 3000 direct CXR VOR/DME and hold.

CLEVELAND APP CON	UNICOM
125.35 354.025	123.0 (CTAF) L







REIL Rwys 11 and 29 L
HIRL Rwy 11-29 L

CATEGORY	A	B	C	D
CIRCLING	1800-1 627 (700-1)		1800-1¾ 627 (700-1¾)	NA

FAF to MAP 5.8 NM

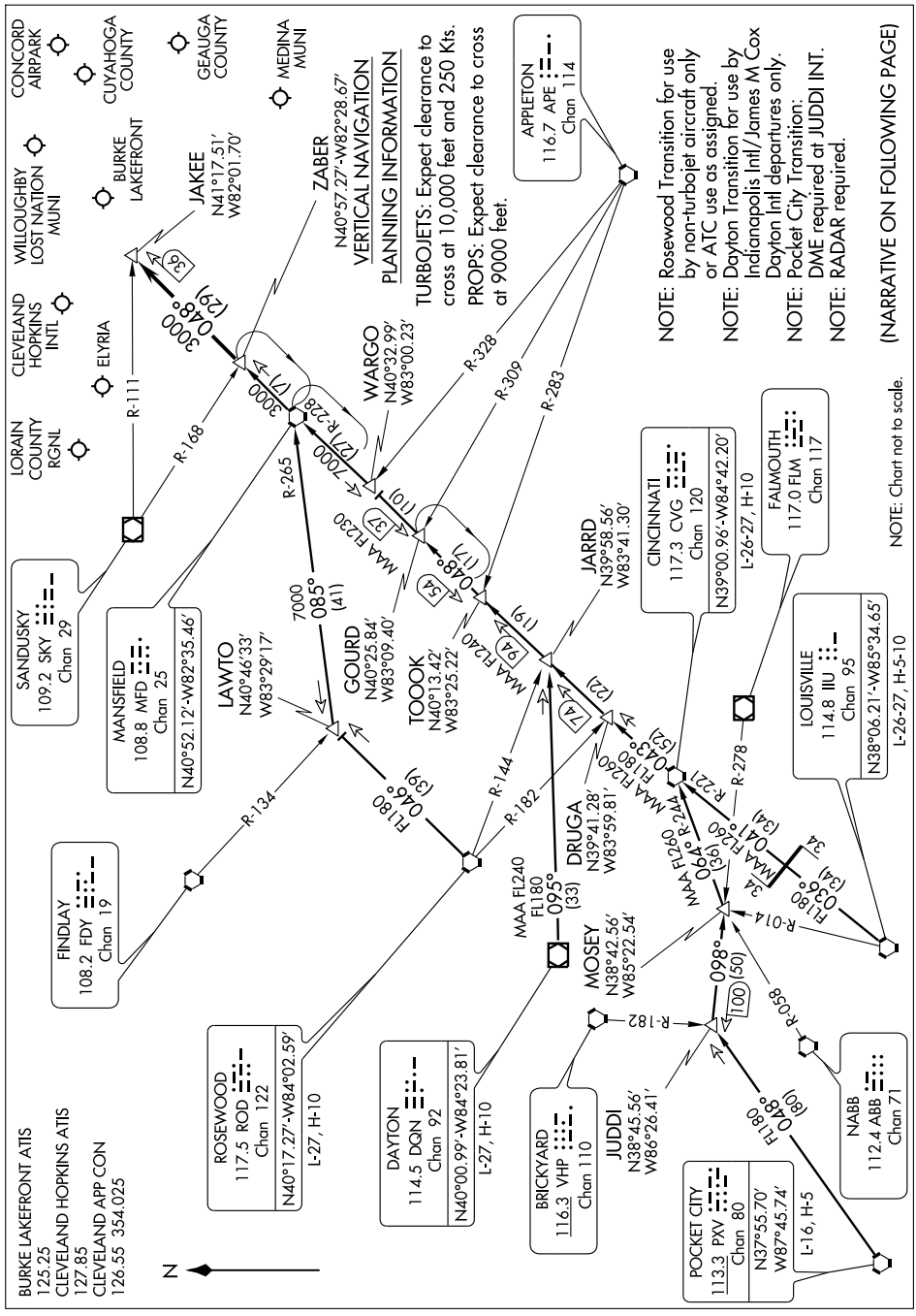
Knots	60	90	120	150	180
Min:Sec	5:48	3:52	2:54	2:19	1:56

EC-2. 14 JAN 2010 to 11 FEB 2010

ZABER ONE ARRIVAL

ST-84 (FAA)

CLEVELAND, OHIO



ARRIVAL ROUTE DESCRIPTION

CINCINNATI TRANSITION (CVG.ZABER1): From over CVG VORTAC via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

DAYTON TRANSITION (DQN.ZABER1): (For use by INDIANAPOLIS INTL/JAMES M COX DAYTON INTL departures only). From over DQN VOR/DME via DQN R-095 to JARRD INT, then via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

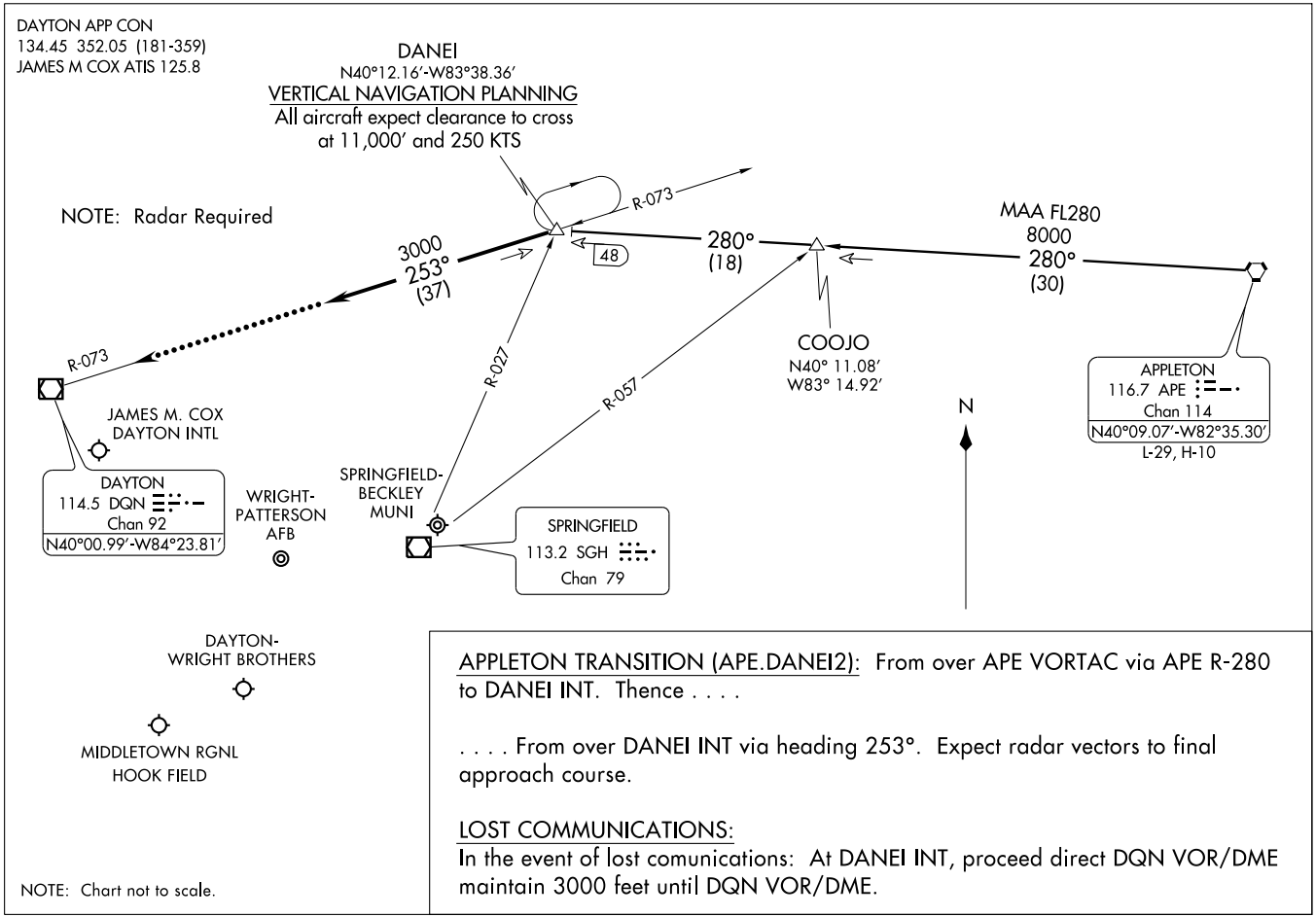
LOUISVILLE TRANSITION (IIU.ZABER1): From over IIU VORTAC via IIU R-036 and CVG R-221 to CVG VORTAC, then via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

POCKET CITY TRANSITION (PXV.ZABER1): (DME REQUIRED at JUDDI INT) From over PXV VORTAC via PXV R-048 to JUDDI INT, then via FLM R-278 to MOSEY INT, then via CVG R-244 to CVG VORTAC, then via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

ROSEWOOD TRANSITION (ROD.ZABER1): (For use by non-turbo aircraft only or ATC use as assigned). From over ROD VORTAC via ROD R-046 to LAWTO INT, then via MFD R-265 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

. . . . From over ZABER INT via MFD R-048 to JAKEE INT. Expect radar vectors to final approach course.

EC-2, 14 JAN 2010 to 11 FEB 2010


DAYTON APP CON
134.45 352.05 (181-359)
JAMES M COX ATIS 125.8
DANEI
N40°12.16′-W83°38.36′
VERTICAL NAVIGATION PLANNING
All aircraft expect clearance to cross
at 11,000′ and 250 KTS
NOTE: Radar Required
R-073
3000
253°
(37)
48
280°
(18)
MAA FL280
8000
280°
(30)
R-073
R-027
R-057
COOJO
N40° 11.08′
W83° 14.92′
N
APPLETON
116.7 APE
Chan 114
N40°09.07′-W82°35.30′
L-29, H-10
JAMES M. COX
DAYTON INTL
DAYTON
114.5 DQN
Chan 92
N40°00.99′-W84°23.81′
WRIGHT-
PATTERSON
AFB
SPRINGFIELD-
BECKLEY
MUNI
SPRINGFIELD
113.2 SGH
Chan 79
DAYTON-
WRIGHT BROTHERS
MIDDLETOWN RGNL
HOOK FIELD
APPLETON TRANSITION (APE.DANEI2): From over APE VORTAC via APE R-280 to DANEI INT. Thence . . . .
. . . . From over DANEI INT via heading 253°. Expect radar vectors to final approach course.
LOST COMMUNICATIONS:
In the event of lost comunications: At DANEI INT, proceed direct DQN VOR/DME maintain 3000 feet until DQN VOR/DME.
NOTE: Chart not to scale.
(DANEI.DANEI2) 09295
DANEI TWO ARRIVAL
ST-107 (FAA)
DAYTON, OHIO

LOC I-MWO	APP CRS	Rwy ldg	5801
111.1	233°	TDZE	651
		Apt Elev	651

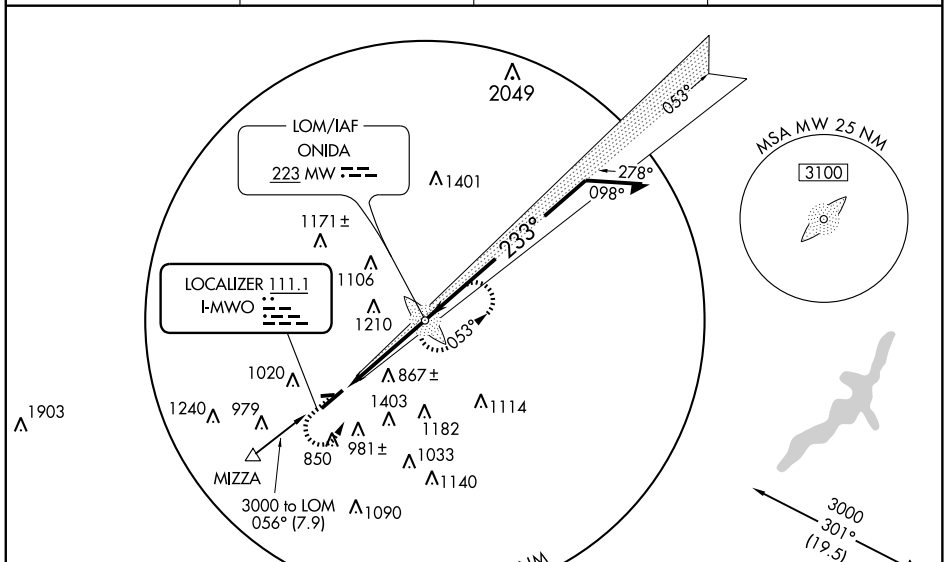
LOC RWY 23

MIDDLETOWN RGNL/ HOOK FIELD (MWO)

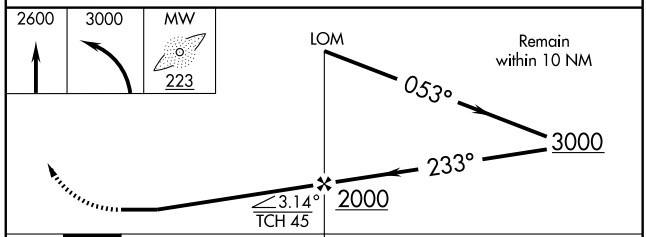
NA

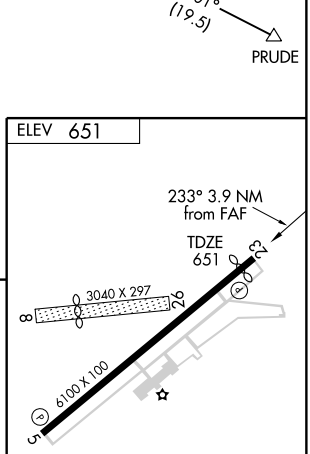
MISSED APPROACH: Climb to 2600 then climbing left turn to 3000 direct MW LOM and hold.

AWOS-3	DAYTON APP CON	CLNC DEL	UNICOM
120.025	118.85 127.225 327.1	119.4	123.0 (CTAF) L



ADF REQUIRED





MIRL Rwy 5-23
REIL Rwys 5 and 23 L

CATEGORY	A	B	C	D
S-23	1080-1	429 (500-1)	1080-1¼ 429 (500-1¼)	1080-1½ 429 (500-1½)
CIRCLING	1320-1	669 (700-1)	1320-1¾ 669 (700-1¾)	1720-3 1069 (1100-3)

FAF to MAP 3.9 NM

Knots	60	90	120	150	180
Min:Sec	3:54	2:36	1:57	1:34	1:18

EC-2, 14 JAN 2010 to 11 FEB 2010

NDB HKF	APP CRS	Rwy ldg	N/A
239	056°	TDZE	N/A
		Apt Elev	651

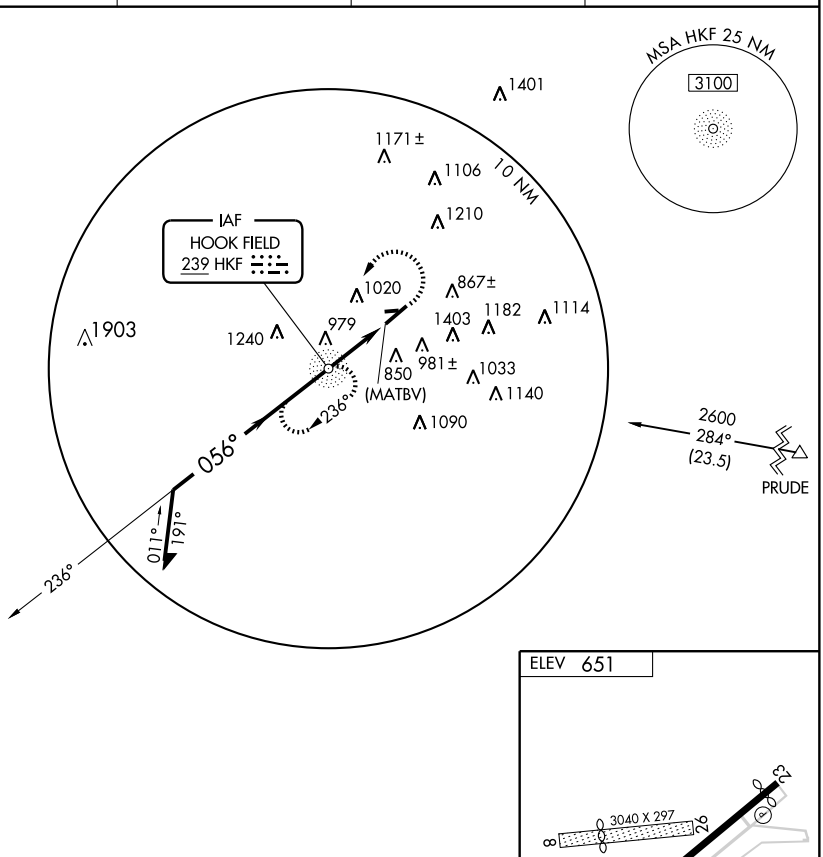
NDB or GPS-A

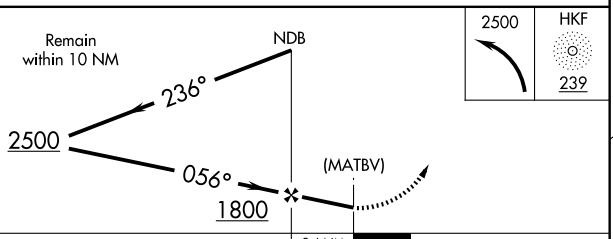
MIDDLETOWN RGNL/ HOOK FIELD (MWO)

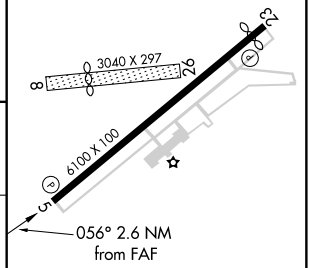
NA

MISSED APPROACH: Climbing left turn to 2500 direct HKF NDB and hold.

AWOS-3	DAYTON APP CON	CLNC DEL	UNICOM
120.025	118.85 127.225 327.1	119.4	123.0 (CTAF) L







MIRL Rwy 5-23
REIL Rwys 5 and 23 L

CATEGORY	A	B	C	D
CIRCLING	1320-1 669 (700-1)		1320-1¾ 669 (700-1¾)	1720-3 1069 (1100-3)

FAF to MAP 2.6 NM					
Knots	60	90	120	150	180
Min:Sec	2:36	1:44	1:18	1:02	0:52

EC-2. 14 JAN 2010 to 11 FEB 2010

LOM MW	APP CRS	Rwy ldg	5801
223	234°	TDZE	651
		Apt Elev	651

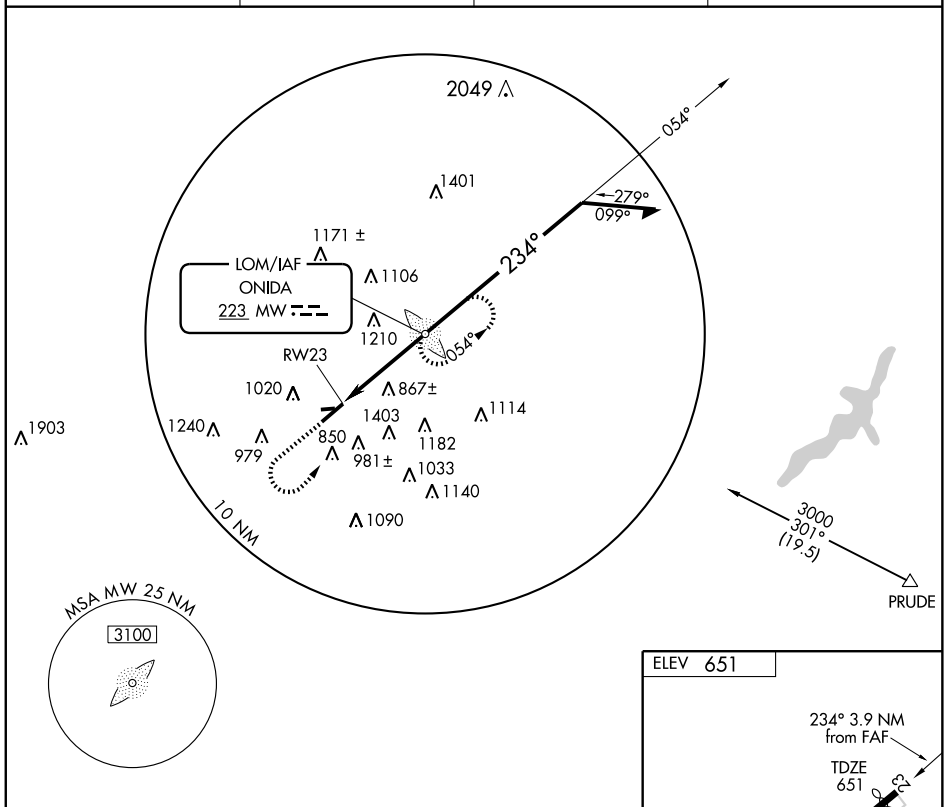
NDB or GPS RWY 23

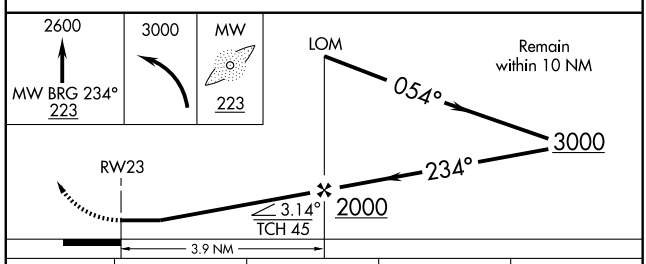
MIDDLETOWN RGNL/ HOOK FIELD (MWO)

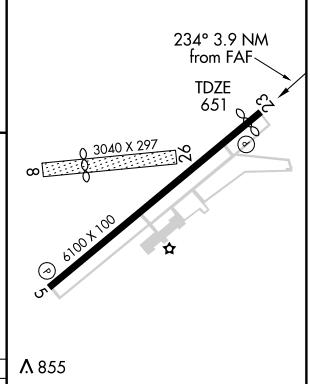
NA

MISSED APPROACH: Climb to 2600 via 234° bearing from MW LOM, then climbing left turn to 3000 direct MW LOM and hold.

AWOS-3	DAYTON APP CON	CLNC DEL	UNICOM
120.025	118.85 127.225 327.1	119.4	123.0 (CTAF) L







CATEGORY	A	B	C	D
S-23	1280-1	629 (700-1)	1280-1¾ 629 (700-1¾)	1280-2 629 (700-2)
CIRCLING	1320-1	669 (700-1)	1320-1¾ 669 (700-1¾)	1720-3 1069 (1100-3)

FAF to MAP 3.9 NM

Knots	60	90	120	150	180
Min:Sec	3:54	2:36	1:57	1:34	1:18

EC-2, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	3498
273°	TDZE	1216
	Apt Elev	1218

GPS RWY 27

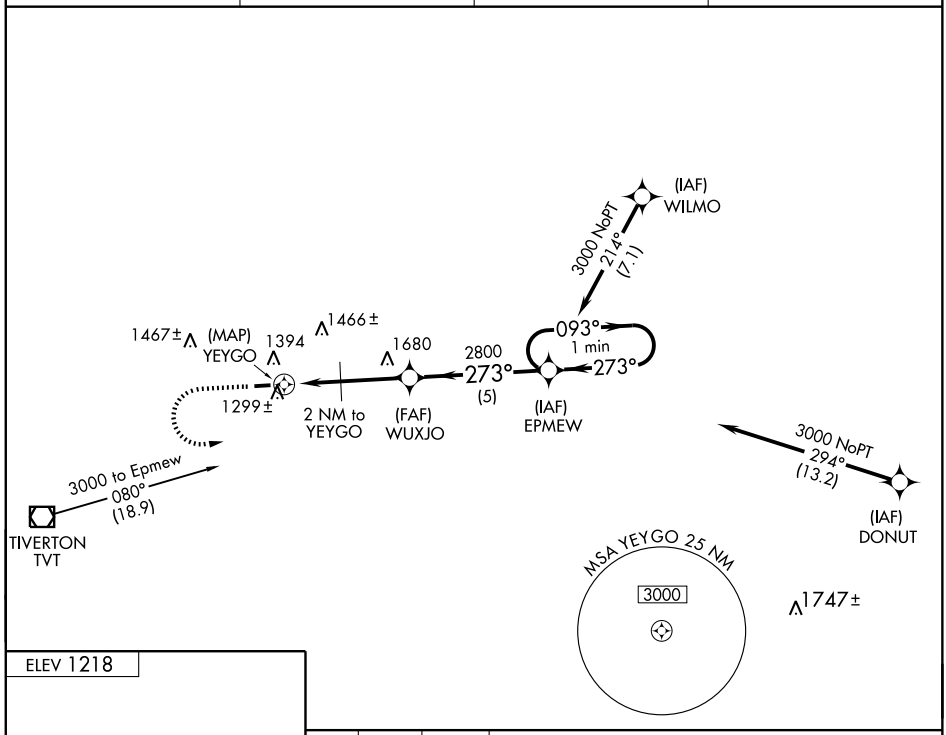
MILLERSBURG/HOLMES COUNTY(1ØG)

Obtain local altimeter setting on CTAF; when not received, use Akron-Canton Rgnl altimeter setting.

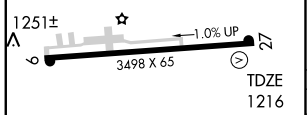
NA

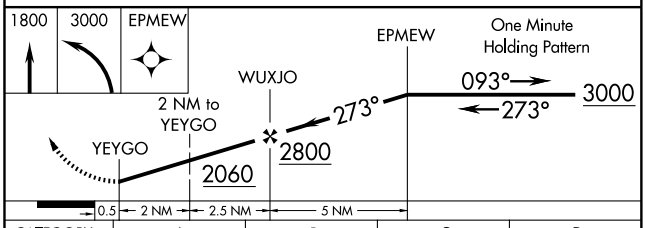
MISSED APPROACH: Climb to 1800 then climbing left turn to 3000 direct EPMEW WP and hold.

AWOS-3	INDIANAPOLIS CENTER	UNICOM	
128.325	124.45 370.9	123.0 (CTAF)	123.4 L



ELEV 1218





CATEGORY	A	B	C	D
S-27	1600-1 384 (400-1)			1600-1¼ 384 (400-1¼)
CIRCLING	1760-1 542 (600-1)		1760-1½ 542 (600-1½)	1780-2 562 (600-2)
AKRON-CANTON RGNL ALTIMETER SETTING MINIMUMS				
S-27	1680-1 464 (500-1)		1680-1¼ 464 (500-1¼)	1680-1½ 464 (500-1½)
CIRCLING	1820-1 602 (700-1)		1820-1¾ 602 (700-1¾)	1820-2 602 (700-2)

MIRL Rwy 9-27 L
REIL Rwys 9 and 27 L

VOR/DME TVT	APP CRS	Rwy ldg	N/A
116.5	062°	TDZE	N/A
Chan112		Apt Elev	1218

VOR or GPS-A

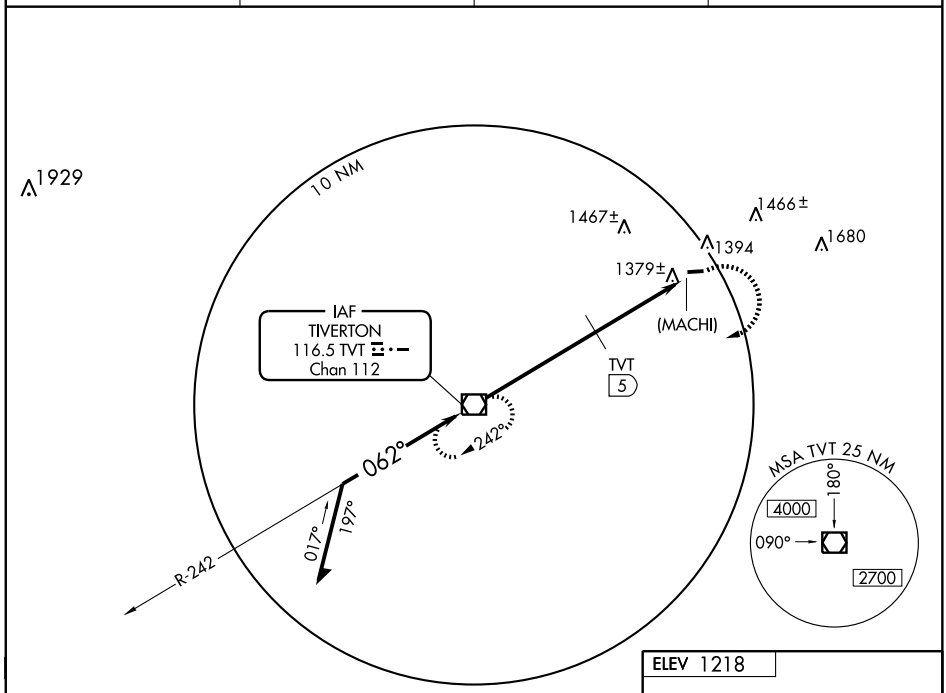
MILLERSBURG/ HOLMES COUNTY (1ØG)

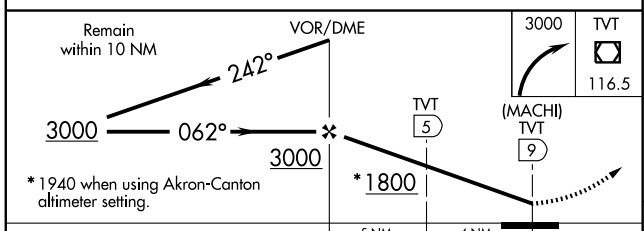
Obtain local altimeter setting on CTAF; when not available, use Akron-Canton altimeter setting and increase all MDAs 140 feet and all visibilities ½ mile.

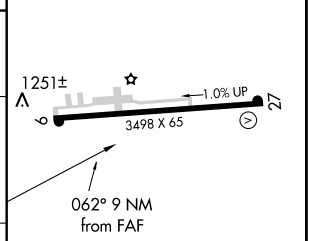
NA

MISSED APPROACH: Climbing right turn to 3000 direct TVT VOR/DME and hold.

AWOS-3	INDIANAPOLIS CENTER	UNICOM	123.4 L
128.325	124.45 370.9	123.0 (CTAF)	







REIL Rwys 9 and 27 L
MIRL Rwy 9-27 L

CATEGORY	A	B	C	D
CIRCLING	1800-1 582 (600-1)		1800-1½ 582 (600-1½)	1800-2 582 (600-2)
DME MINIMUMS				
CIRCLING	1760-1 542 (600-1)		1760-1½ 542 (600-1½)	1780-2 562 (600-2)

FAF to MAP 9 NM

Knots	60	90	120	150	180
Min:Sec	9:00	6:00	4:30	3:36	3:00

EC-2. 14 JAN 2010 to 11 FEB 2010

VOR BUD	APP CRS	Rwy ldg	N/A
109.8	304°	TDZE	N/A
		Apt Elev	1085

VOR or GPS-A

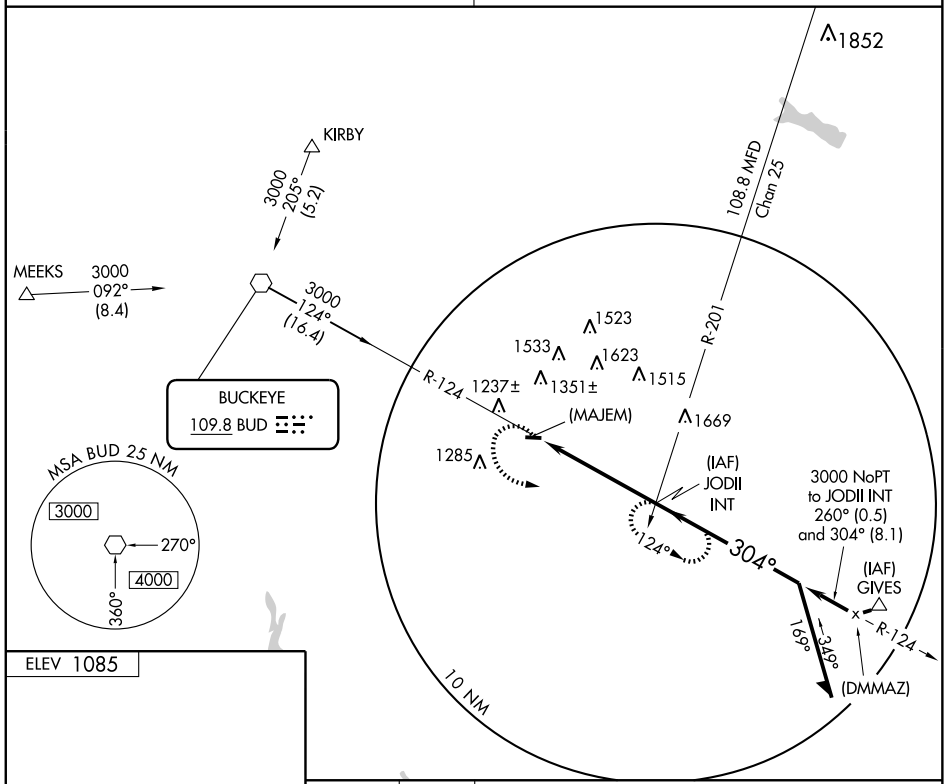
MOUNT GILEAD/MORROW COUNTY (4I9)

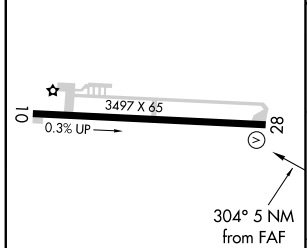
Use Mansfield altimeter setting; when not avalable, use Columbus altimeter setting.

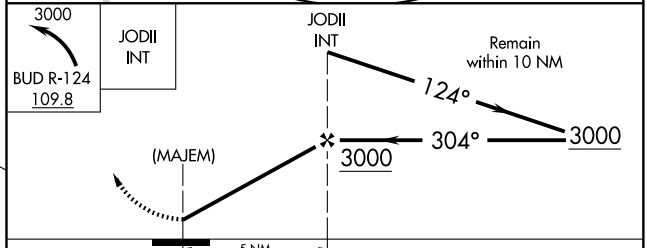
NA

MISSED APPROACH: Climbing left turn to 3000 via BUD R-124 to JODII Int and hold.

MANSFIELD APP CON ★	UNICOM
124.2 390.8	122.8 (CTAF) L







MIRL Rwy 10-28 L

FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

CATEGORY	A	B	C	D
CIRCLING	1700-1 615 (700-1)	1720-1 635 (700-1)	1720-1¾ 635 (700-1¾)	NA
COLUMBUS ALTIMETER SETTING MINIMUMS				
CIRCLING	1740-1 655 (700-1)	1760-1 675 (700-1)	1760-2 675 (700-2)	NA

APP CRS	Rwy ldg	5500
104°	TDZE	1188
	Apt Elev	1191

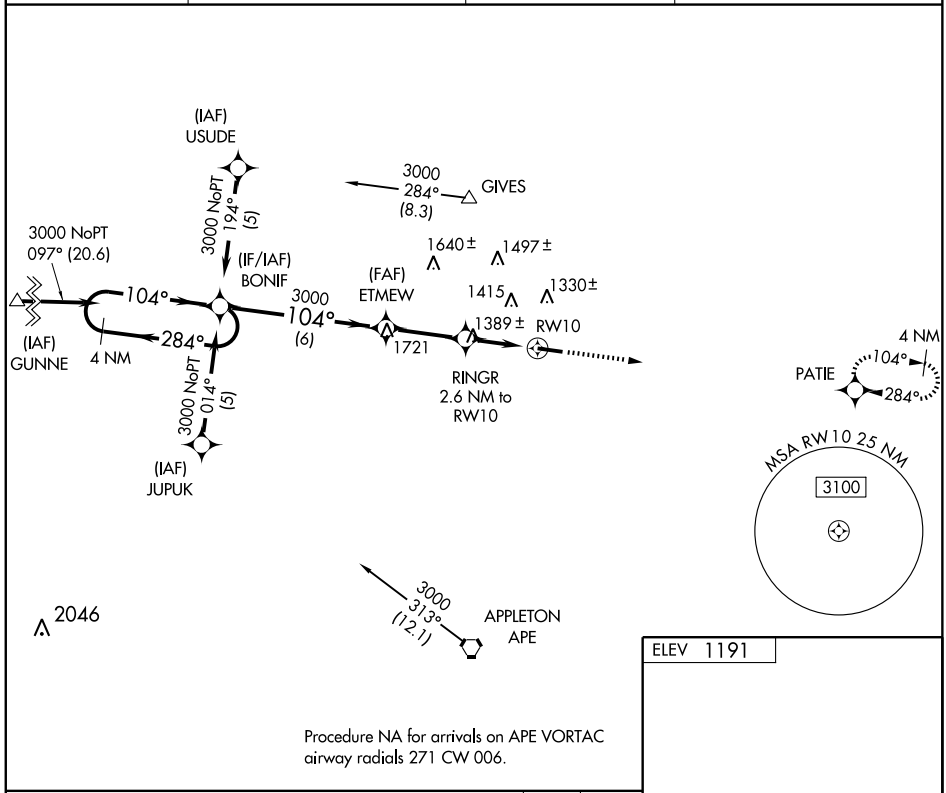
RNAV (GPS) RWY 10

MOUNT VERNON / KNOX COUNTY (4I3)

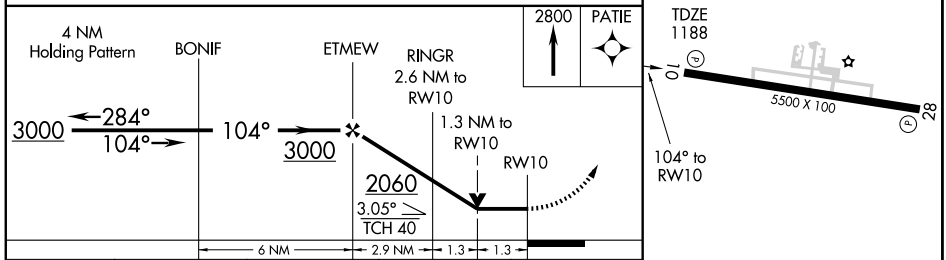
DME/DME RNP-0.3 NA. When local altimeter setting not received, use Newark altimeter setting and increase all MDA 100 feet, LNAV Cat C and D and Circling Cat D visibility ¼ mile. VDP NA with Newark altimeter setting. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 2800 direct PATIE and hold.

AWOS-3	COLUMBUS APP CON	CLNC DEL	UNICOM
126.05	120.2 317.775	119.45	123.05 (CTAF) L



Procedure NA for arrivals on APE VORTAC airway radials 271 CW 006.



CATEGORY	A	B	C	D
LNAV MDA	1640-1 452 (500-1)		1640-1¼ 452 (500-1¼)	1640-1½ 452 (500-1½)
CIRCLING	1660-1 469 (500-1)		1680-1½ 489 (500-1½)	1780-2 589 (600-2)

MIRL Rwy 10-28 L
REIL Rwys 10 and 28

EC-2, 14 JAN 2010 to 11 FEB 2010

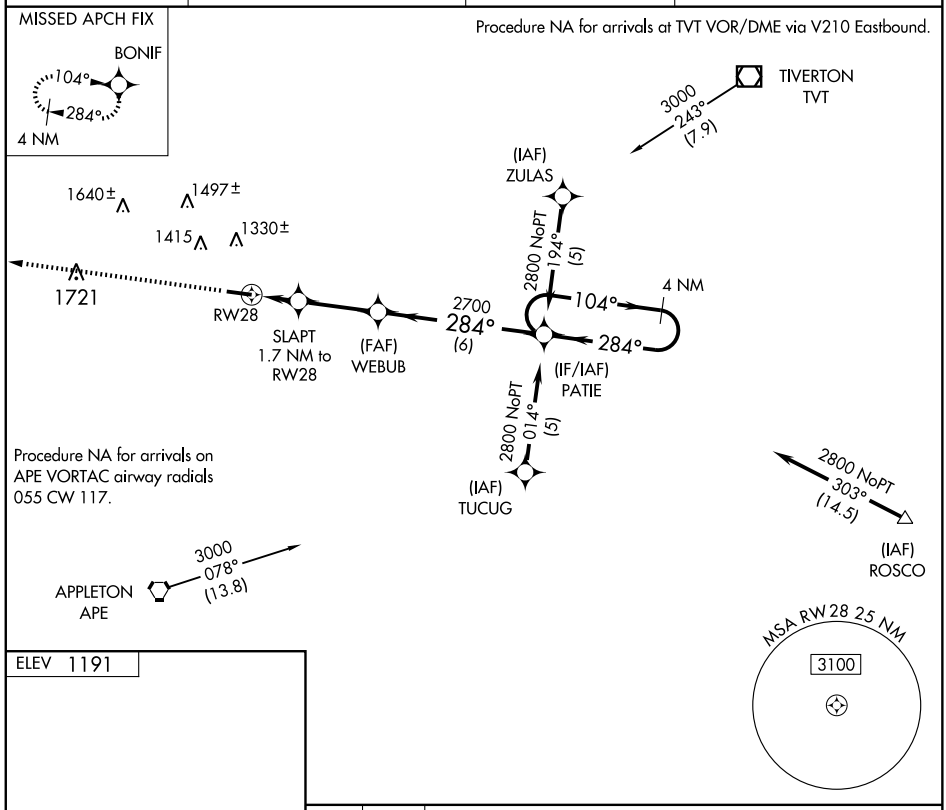
APP CRS	Rwy ldg	5500
284°	TDZE	1185
	Apt Elev	1191

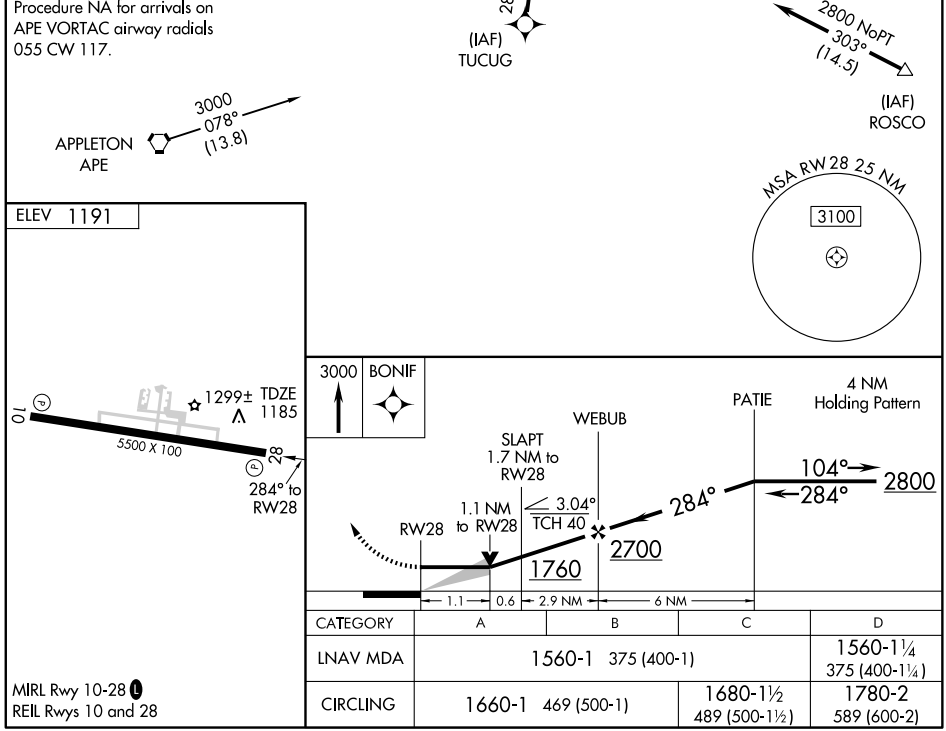
RNAV (GPS) RWY 28
MOUNT VERNON / KNOX COUNTY (4I3)

DME/DME RNP-0.3 NA.
When local altimeter setting not received, use Newark altimeter setting and increase all MDA 100 feet, LNAV Cat C and D and Circling Cat D visibility ¼ mile.
VDP NA with Newark altimeter setting.

MISSED APPROACH: Climb to 3000 direct BONIF and hold.

AWOS-3	COLUMBUS APP CON	CLNC DEL	UNICOM
126.05	120.2 317.775	119.45	123.05 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	1560-1 375 (400-1)			1560-1¼ 375 (400-1¼)
CIRCLING	1660-1 469 (500-1)		1680-1½ 489 (500-1½)	1780-2 589 (600-2)

MIRL Rwy 10-28 L
REIL Rwys 10 and 28

EC-2, 14 JAN 2010 to 11 FEB 2010

VORTAC APE 116.7 Chan 114	APP CRS 022°	Rwy ldg N/A TDZE N/A Apt Elev 1192

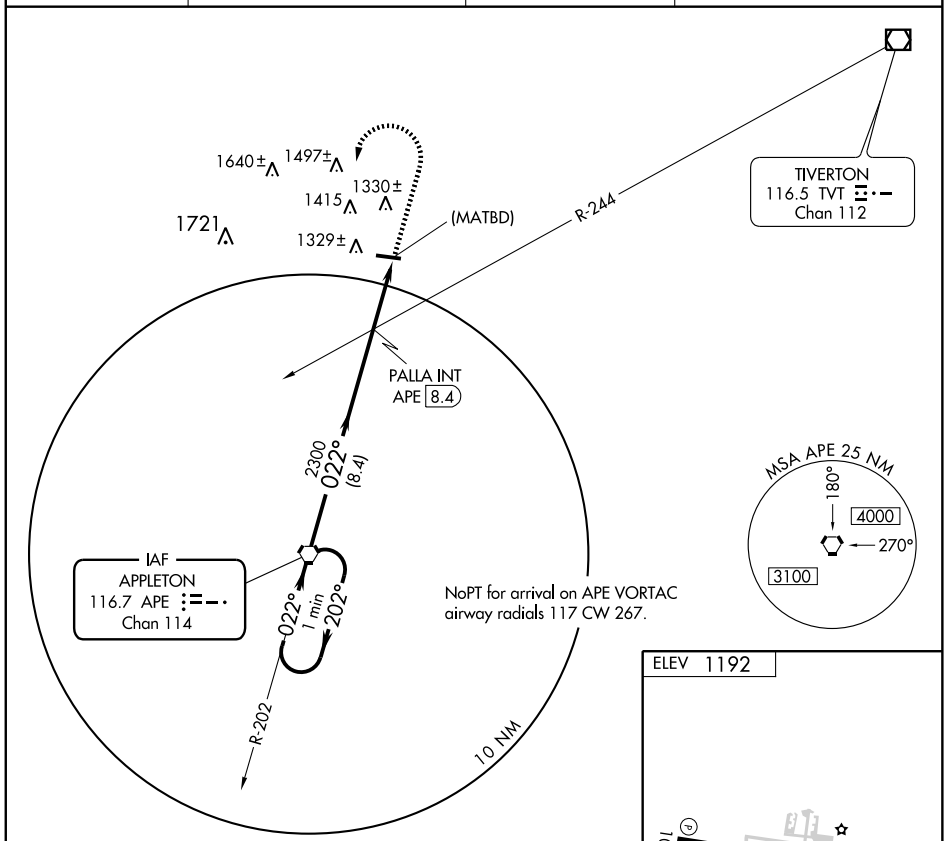
VOR or GPS-A

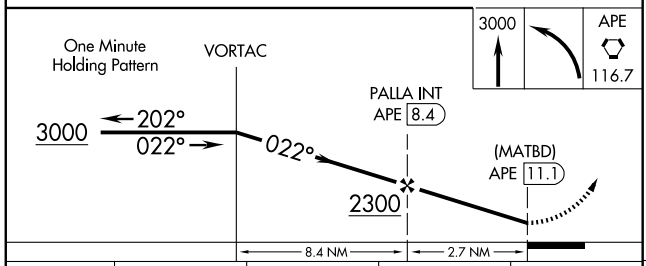
MOUNT VERNON / KNOX COUNTY (4I3)

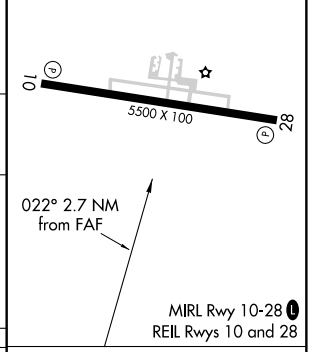
NA

MISSED APPROACH: Climb to 3000 then left turn direct APE VORTAC and hold.

AWOS-3	COLUMBUS APP CON	CLNC DEL	UNICOM
126.05	120.2 317.775	119.45	123.05 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	1660-1 468 (500-1)		1660-1½ 468 (500-1½)	1760-2 568 (600-2)

FAF to MAP 2.7 NM

Knots	60	90	120	150	180
Min:Sec	2:42	1:48	1:21	1:05	0:54

EC-2. 14 JAN 2010 to 11 FEB 2010

VOR/DME VWV 113.1 Chan 78	APP CRS 258°	Rwy ldg 3956 TDZE 683 Apt Elev 683

VOR or GPS RWY 28

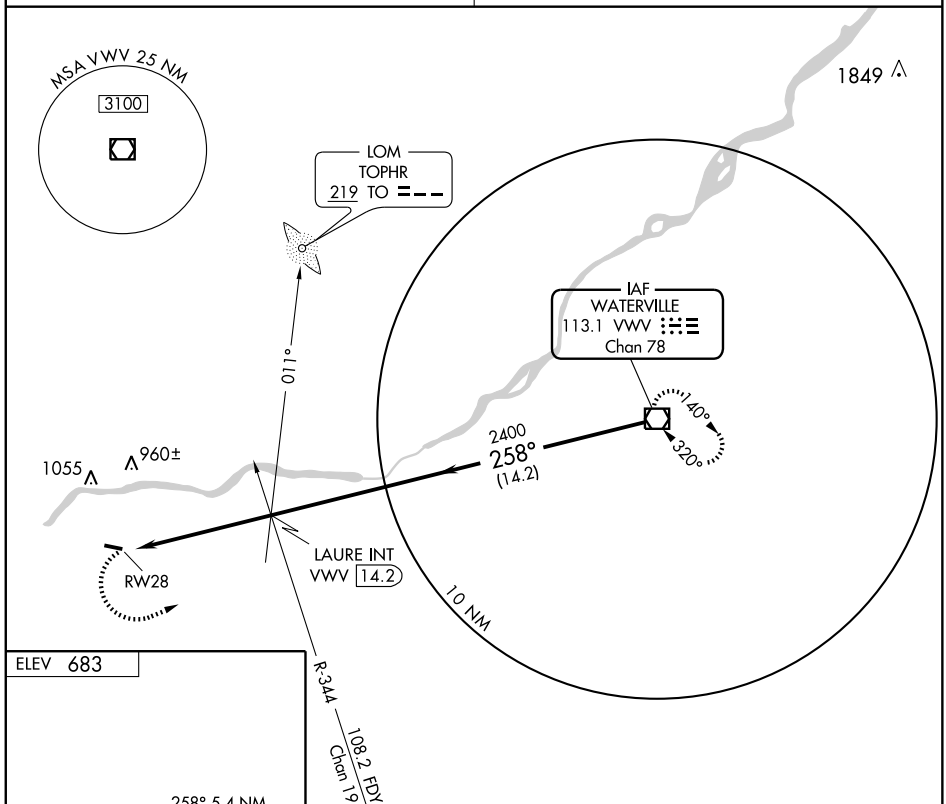
NAPOLEON / HENRY COUNTY (7W5)

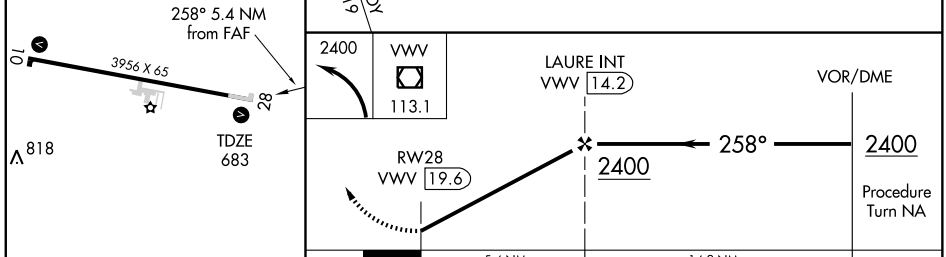
NA Use Toledo altimeter setting.

MISSED APPROACH: Climbing left turn to 2400 direct VWV VOR/DME and hold.

TOLEDO APP CON
134.35 307.0

UNICOM
123.0 (CTAF) L





REIL Rwy 28 L
MIRL Rwy 10-28 L

FAF to MAP 5.4 NM					
Knots	60	90	120	150	180
Min:Sec	5:24	3:36	2:42	2:10	1:48

CATEGORY	A	B	C	D
S-28	1140-1 457 (500-1)		1140-1¼ 457 (500-1¼)	1140-1½ 457 (500-1½)
CIRCLING	1240-1 557 (600-1)		1240-1½ 557 (600-1½)	1420-2¼ 737 (800-2¼)

EC-2, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	3498
259°	TDZE	1047
	Apt Elev	1051

RNAV (GPS) RWY 26

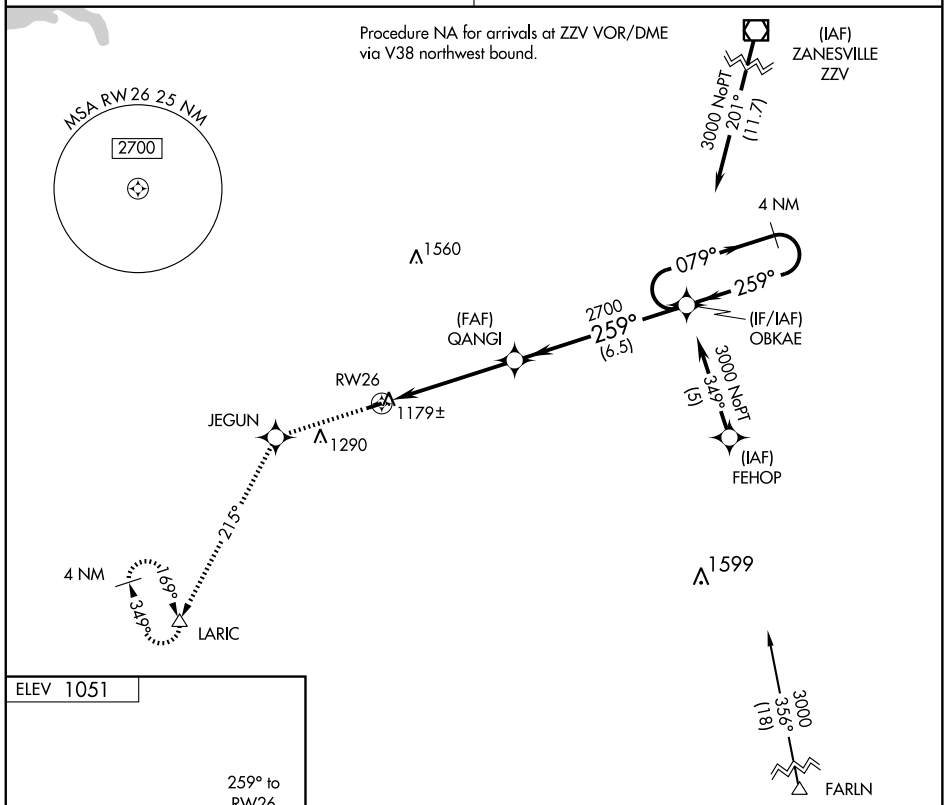
NEW LEXINGTON/ PERRY COUNTY (I86)

NA

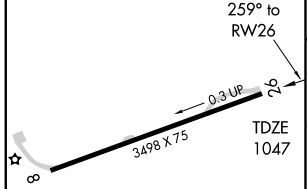
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Use Zanesville altimeter setting; when not received, use Lancaster altimeter setting and increase all MDA 20 feet.

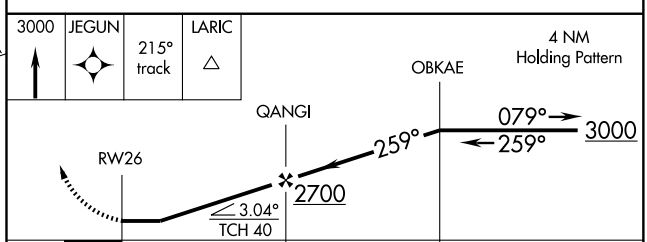
MISSED APPROACH: Climb to 3000 direct JEGUN and via 215° track to LARIC and hold.

INDIANAPOLIS CENTER	UNICOM
124.45 370.9	122.8 (CTAF) L



ELEV 1051





CATEGORY	A	B	C	D
LNAV MDA	1500 - 1	453 (500-1)	1500 - 1¼ 453 (500-1¼)	NA
CIRCLING	1600 - 1	549 (600-1)	1600 - 1½ 549 (600-1½)	NA

REIL Rwy 26 L
MIRL Rwy 8-26 L

EC-2, 14 JAN 2010 to 11 FEB 2010

VOR/DME ZZV	APP CRS	Rwy ldg	3498
111.4	229°	TDZE	1047
Chan 51		Apt Elev	1051

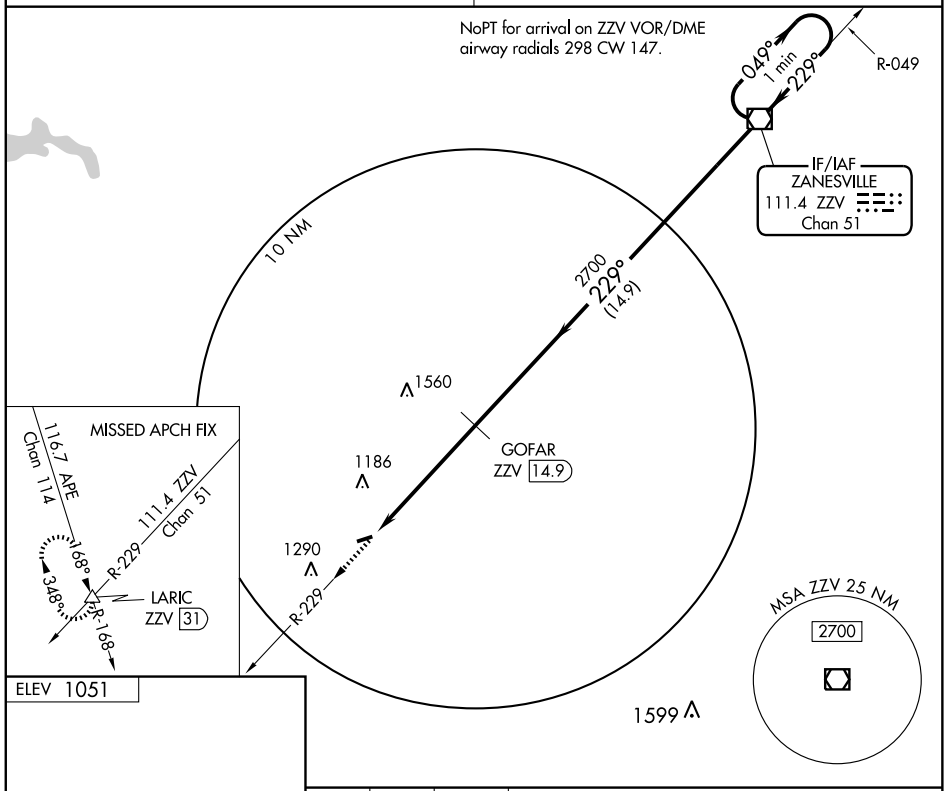
VOR/DME RWY 26

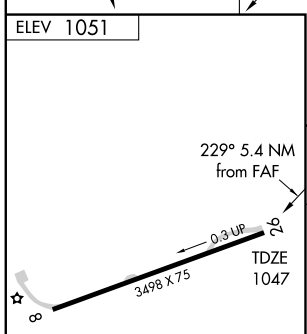
NEW LEXINGTON/ PERRY COUNTY (I86)

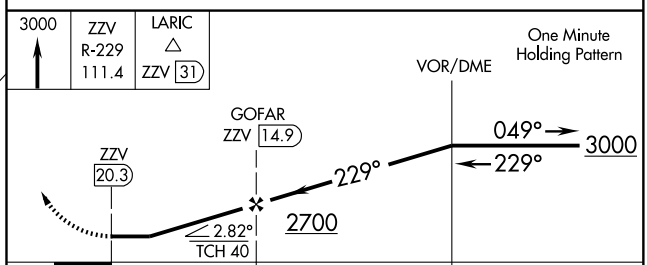
T A NA — Visibility reduction by helicopters NA. Use Zanesville altimeter setting; when not received, use Lancaster altimeter setting and increase all MDA 20 feet.

MISSED APPROACH: Climb to 3000 via ZZV VOR/DME R-229 to LARIC INT/ZZV 31 DME and hold.

INDIANAPOLIS CENTER	UNICOM
124.45 370.9	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-26	1620-1 573 (600-1)	1620-1¼ 573 (600-1¼)	1620-1½ 573 (600-1½)	NA
CIRCLING	1620-1 569 (600-1)	1620-1¼ 569 (600-1¼)	1620-1½ 569 (600-1½)	NA

REIL Rwy 26 L
MIRL Rwy 8-26 L

APP CRS	Rwy ldg	3621
147°	TDZE	894
	Apt Elev	894

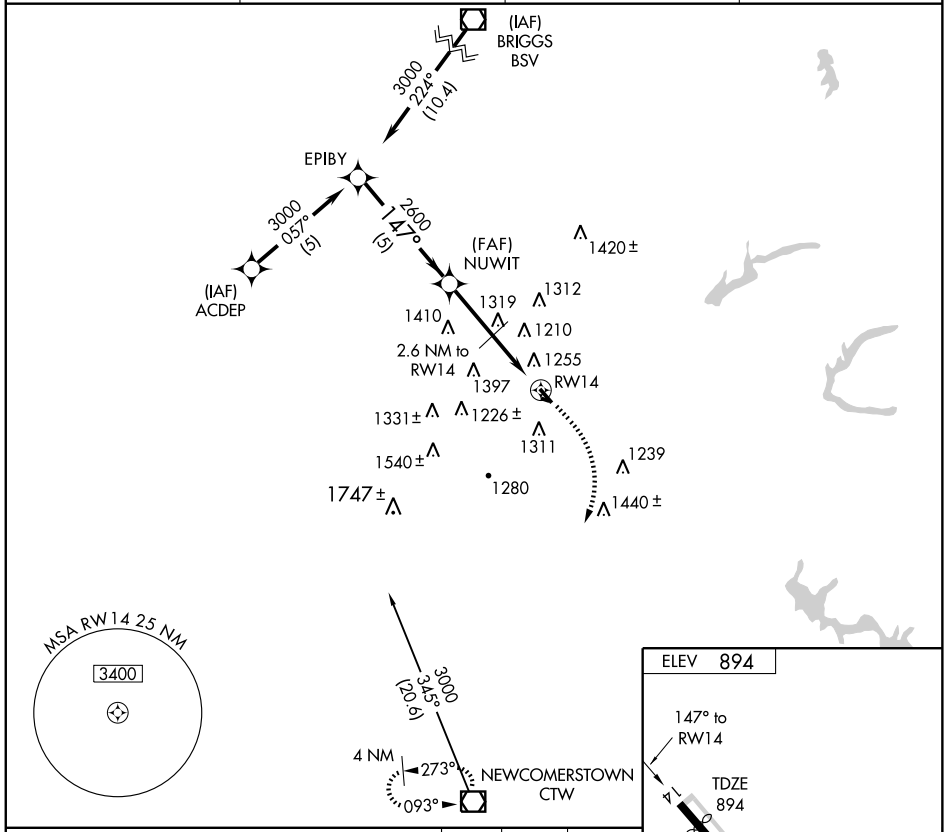
GPS RWY 14

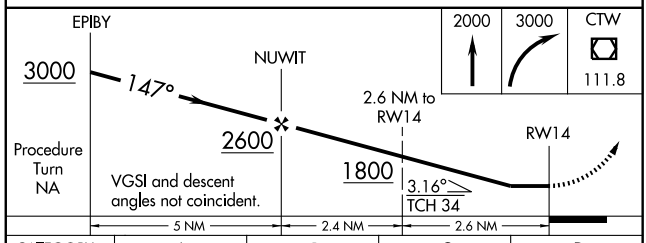
NEW PHILADELPHIA/ HARRY CLEVER FIELD (PHD)

NA

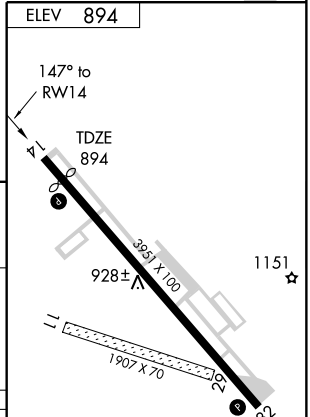
MISSED APPROACH: Climb to 2000, then climbing right turn to 3000 direct CTW VOR/DME and hold.

ASOS	AKRON-CANTON APP CON★	UNICOM	
121.425	125.5 371.875	122.8 (CTAF)	123.3 L





CATEGORY	A	B	C	D
S-14	1560-1 666 (700-1)		1560-1¾ 666 (700-1¾)	NA
CIRCLING	1620-1 726 (800-1)		1620-2 726 (800-2)	NA



REIL Rwys 14 and 32 L
MIRL Rwy 14-32 L

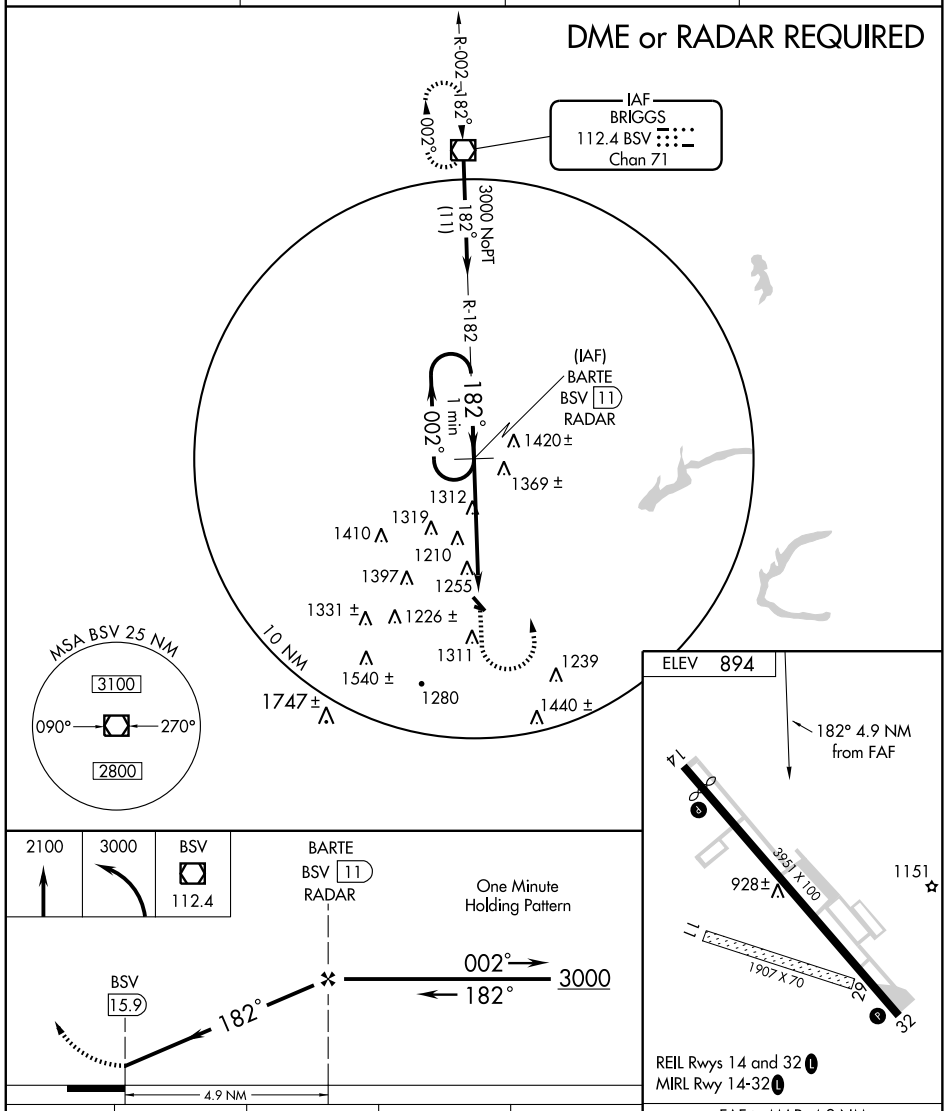
VOR/DME BSV 112.4 Chan 71	APP CRS 182°	Rwy ldg N/A TDZE N/A Apt Elev 894

VOR-A

NEW PHILADELPHIA/ HARRY CLEVER FIELD (PHD)

MISSED APPROACH: Climb to 2100, then climbing left turn to 3000 direct BSV VOR/DME and hold.

ASOS	AKRON-CANTON APP CON ★	UNICOM	
121.425	125.5 371.875	122.8 (CTAF)	123.3 L



CATEGORY	A	B	C	D
CIRCLING	1620-1 726 (800-1)		1620-2 726 (800-2)	NA

FAF to MAP 4.9 NM					
Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38

EC-2, 14 JAN 2010 to 11 FEB 2010

VOR/DME CTW 111.8 Chan 55	APP CRS 017°	Rwy ldg N/A TDZE N/A Apt Elev 895

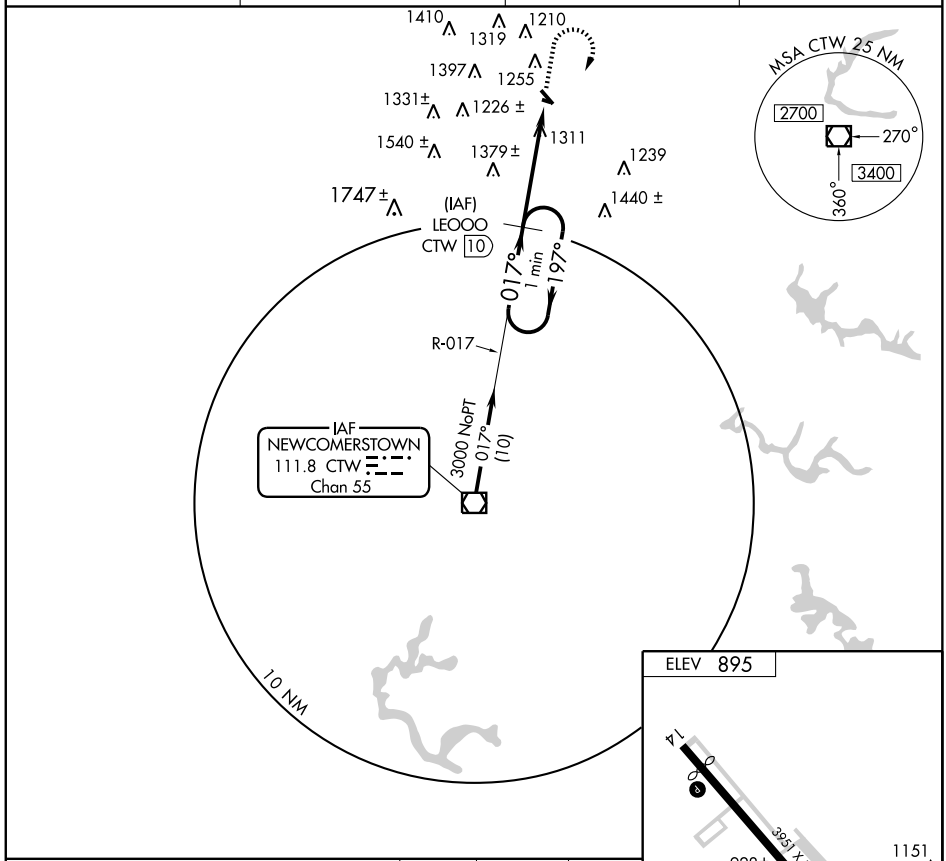
VOR/DME or GPS-B

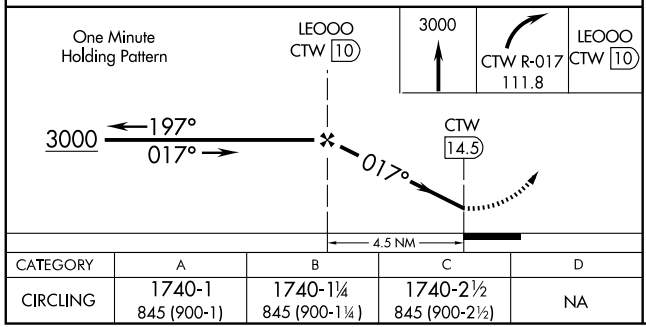
NEW PHILADELPHIA/ HARRY CLEVER FIELD (PHD)

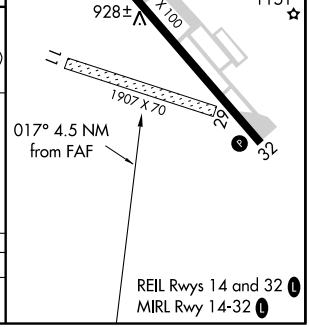
NA

MISSED APPROACH: Climb to 3000 then right turn via CTW R-017 to LEOOO 10 DME and hold.

ASOS	AKRON-CANTON APP CON*	UNICOM	
121.425	125.5 371.875	122.8 (CTAF)	123.3 L







CATEGORY	A	B	C	D
CIRCLING	1740-1 845 (900-1)	1740-1¼ 845 (900-1¼)	1740-2½ 845 (900-2½)	NA

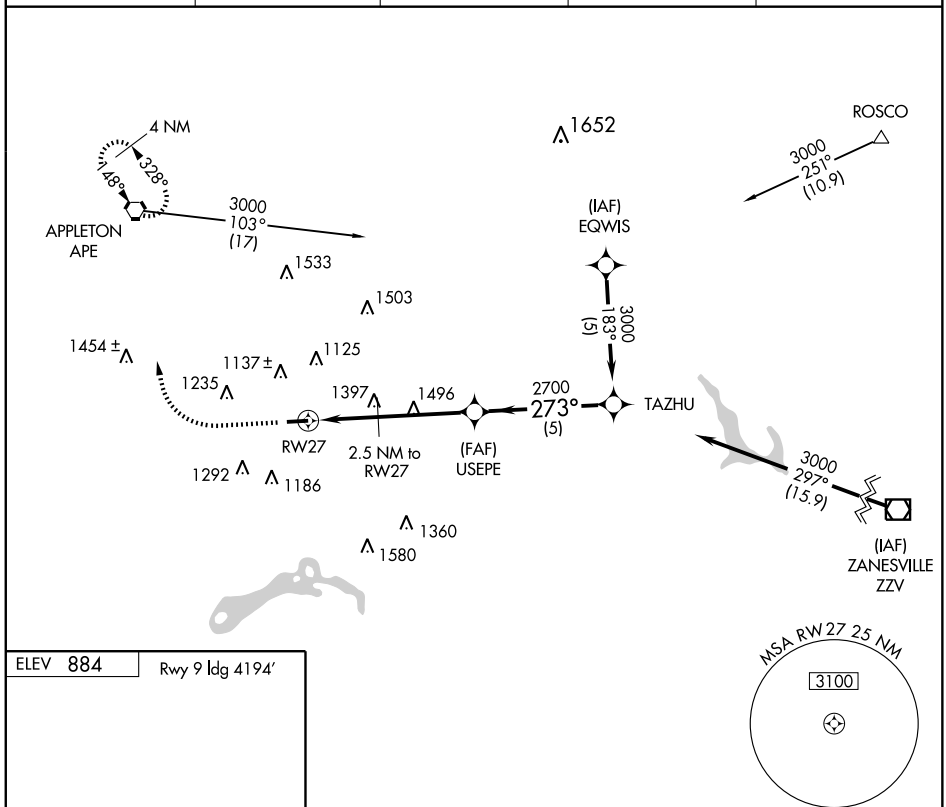
APP CRS	Rwy ldg	4649
273°	TDZE	879
	Apt Elev	884

GPS RWY 27
NEWARK-HEATH (VTA)

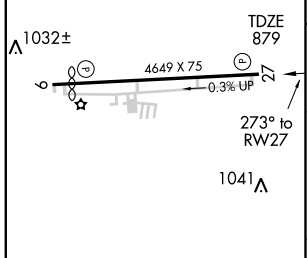
NA

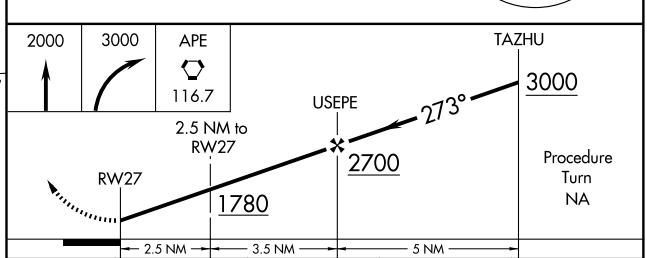
MISSED APPROACH: Climb to 2000 then climbing right turn to 3000 direct APE VORTAC and hold.

ASOS	COLUMBUS APP CON	CLNC DEL	UNICOM	
121.125	120.2 317.775	124.85	122.7 (CTAF)	123.3 L



ELEV 884 Rwy 9 ldg 4194'



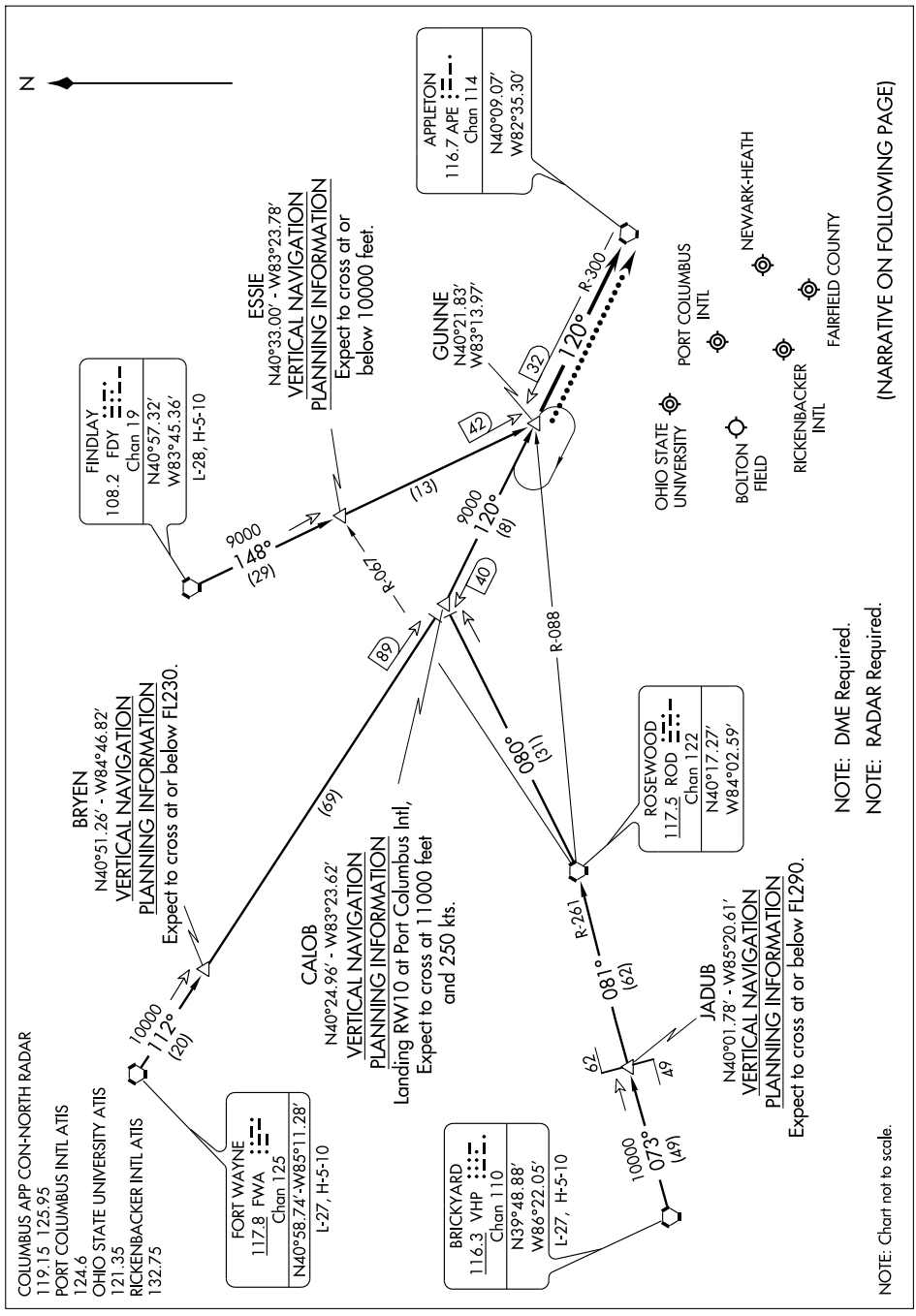


CATEGORY	A	B	C	D
S-27	1660-1 781 (800-1)	1660-1¼ 781 (800-1¼)	1660-2¼ 781 (800-2¼)	1660-2½ 781 (800-2½)
CIRCLING	1660-1 776 (800-1)	1660-1¼ 776 (800-1¼)	1660-2¼ 776 (800-2¼)	1660-2½ 776 (800-2½)

REIL Rwys 9 and 27 L
MIRL Rwy 9-27 L

GUNNE ONE ARRIVAL

COLUMBUS, OHIO



GUNNE ONE ARRIVAL

ARRIVAL ROUTE DESCRIPTION

BRICKYARD TRANSITION (VHP.GUNNE1): From over VHP VORTAC via VHP R-073 to JADUB INT, then via ROD R-261 to ROD VORTAC, then via ROD R-080 to CALOB INT, then via APE R-300 to GUNNE INT. Thence. . . .

FINDLEY TRANSITION (FDY.GUNNE1): From over FDY VORTAC via FDY R-148 to GUNNE INT. Thence. . . .

FORT WAYNE TRANSITION (FWA.GUNNE1): From over FWA VORTAC via FWA R-112 to CALOB INT, then via APE R-300 to GUNNE INT. Thence. . . .

. . . .From over GUNNE via heading 120°. Expect radar vectors to final approach course.

LOST COMMUNICATION PROCEDURE:

For all airports - From over GUNNE INT direct APE VORTAC, maintain 4000 and hold.

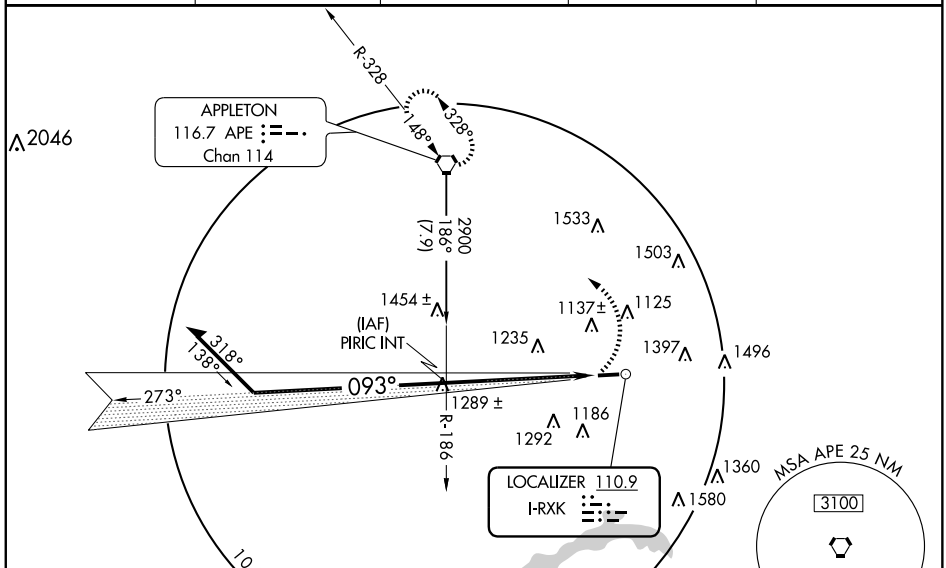
LOC I-RXK	APP CRS	Rwy ldg	4194
110.9	093°	TDZE	883
		Apt Elev	884

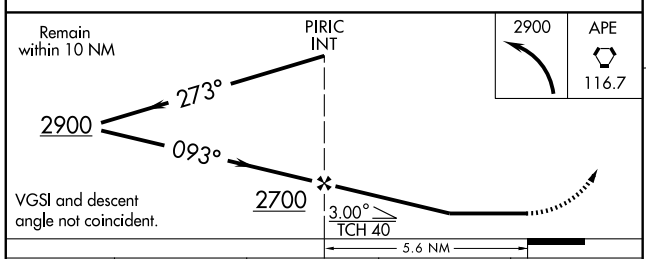
LOC RWY 9
NEWARK-HEATH (VTA)

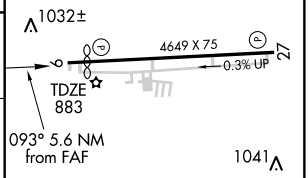
If local altimeter not received, use Port Columbus Intl altimeter setting and increase all MDAs 60 feet.

MISSED APPROACH: Climbing left turn to 2900 direct APE VORTAC and hold.

ASOS	COLUMBUS APP CON	CLNC DEL	UNICOM	
121.125	120.2 317.775	124.85	122.7 (CTAF)	123.3 L







REIL Rwys 9 and 27 L
MIRL Rwy 9-27 L

CATEGORY	A	B	C	D
S-9	1420-1 537 (600-1)		1420-1½ 537 (600-1½)	1420-1¾ 537 (600-1¾)
CIRCLING	1480-1 596 (600-1)		1480-1½ 596 (600-1½)	1560-2¼ 676 (700-2¼)

FAF to MAP 5.6 NM

Knots	60	90	120	150	180
Min:Sec	5:36	3:44	2:48	2:14	1:52

EC-2, 14 JAN 2010 to 11 FEB 2010

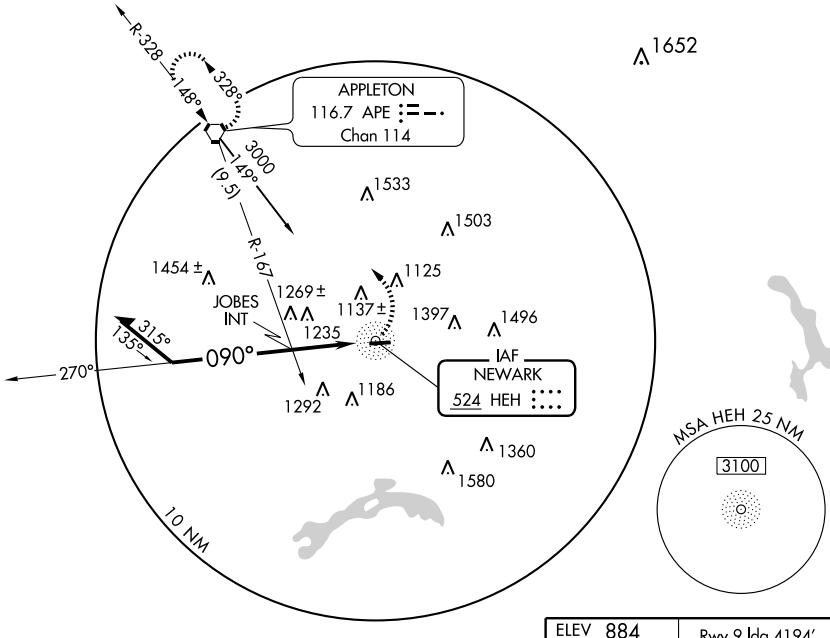
NDB HEH	APP CRS	Rwy ldg	4194
524	090°	TDZE	883
		Apt Elev	884

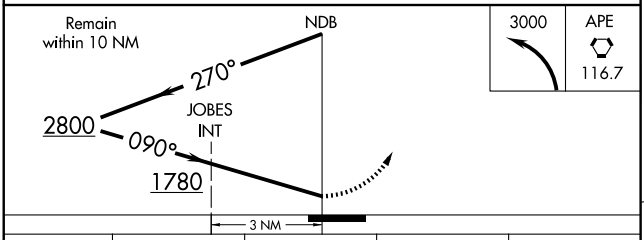
NDB or GPS RWY 9
NEWARK-HEATH (VTA)

NA

MISSED APPROACH: Climbing left turn to 3000 direct APE VORTAC and hold.

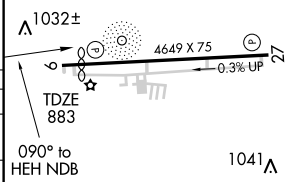
ASOS	COLUMBUS APP CON		CLNC DEL	UNICOM	
121.125	120.2	317.775	124.85	122.7 (CTAF)	123.3





CATEGORY	A	B	C	D
S-9	1780-1¼ 897 (900-1¼)		1780-2¾ 897 (900-2¾)	1780-3 897 (900-3)
CIRCLING	1780-1¼ 896 (900-1¼)		1780-2¾ 896 (900-2¾)	1780-3 896 (900-3)
JOBES FIX MINIMUMS				
S-9	1580-1 697 (700-1)		1580-2 697 (700-2)	1580-2¼ 697 (700-2¼)
CIRCLING	1580-1 696 (700-1)		1580-2 696 (700-2)	1580-2¼ 696 (700-2¼)

ELEV 884 Rwy 9 ldg 4194′



REIL Rwys 9 and 27

MIRL Rwy 9-27

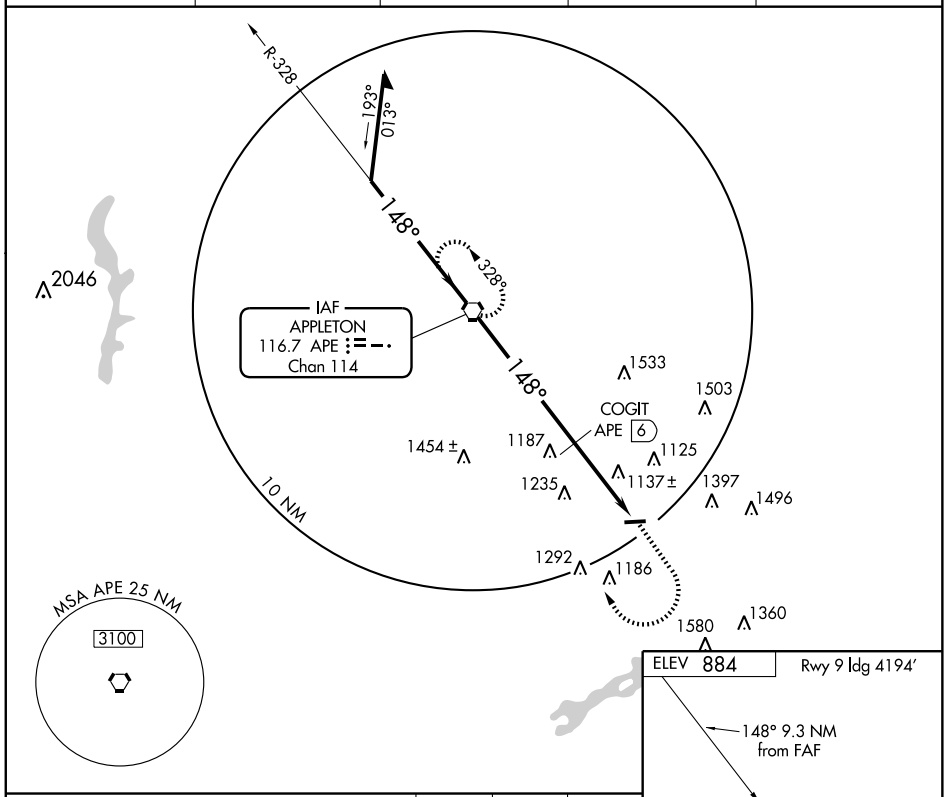
VORTAC APE	APP CRS	Rwy ldg	N/A
116.7	148°	TDZE	N/A
Chan 114		Apt Elev	884

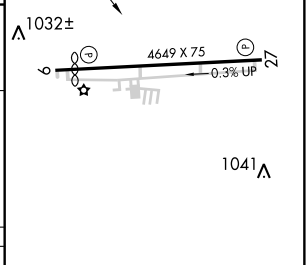
VOR-A
NEWARK-HEATH (VTA)

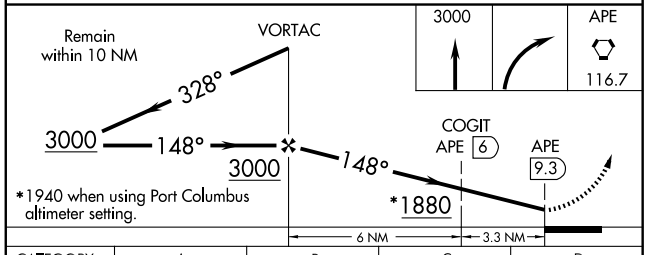
When local altimeter setting not received, use Port Columbus altimeter setting and increase all MDA 60 feet and COGIT fix minimums Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 3000 then right turn direct APE VORTAC and hold.

ASOS	COLUMBUS APP CON		CLNC DEL	UNICOM	
121.125	120.2	317.775	124.85	122.7 (CTAF)	123.3 L







CATEGORY	A	B	C	D
CIRCLING	1880-1¼ 996 (1000-1¼)	1880-1½ 996 (1000-1½)	1880-3	996 (1000-3)
COGIT FIX MINIMUMS				
CIRCLING	1520-1	636 (700-1)	1520-1¾ 636 (700-1¾)	1560-2¼ 676 (700-2¼)

REIL Rwys 9 and 27 L
MIRL Rwy 9-27 L

FAF to MAP 9.3 NM					
Knots	60	90	120	150	180
Min:Sec	9:18	6:12	4:39	3:43	3:06

EC-2. 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	3542
276°	TDZE	851
	Apt Elev	852

GPS RWY 28
NORWALK-HURON COUNTY (5A1)

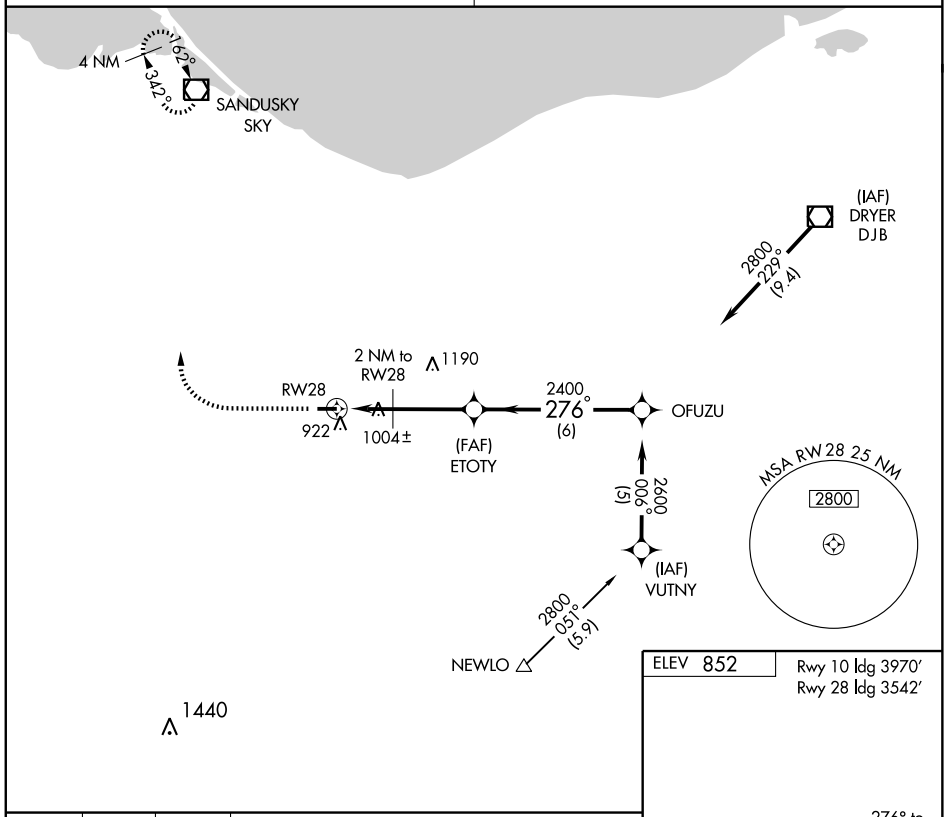
NA

Use Cleveland-Hopkins altimeter setting.

MISSED APPROACH: Climb to 2000, then climbing right turn to 3000 direct SKY VOR/DME and hold.

MANSFIELD APP CON ★
124.2 390.8

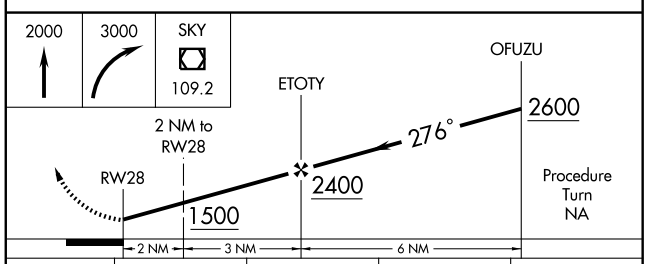
UNICOM
122.8 (CTAF) L

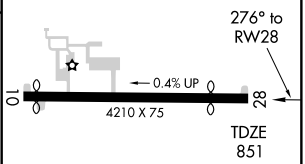


EC-2, 14 JAN 2010 to 11 FEB 2010

ELEV 852

Rwy 10 ldg 3970′
Rwy 28 ldg 3542′





CATEGORY	A	B	C	D
S-28	1340-1 489 (500-1)		1340-1¼ 489 (500-1¼)	1340-1½ 489 (500-1½)
CIRCLING	1360-1 508 (600-1)	1400-1 548 (600-1)	1400-1½ 548 (600-1½)	1420-2 568 (600-2)

MIRL Rwy 10-28 L

VOR/DME SKY 109.2 Chan 29	APP CRS 162°	Rwy ldg N/A TDZE N/A Apt Elev 852

VOR or GPS-A

NORWALK-HURON COUNTY (5A1)

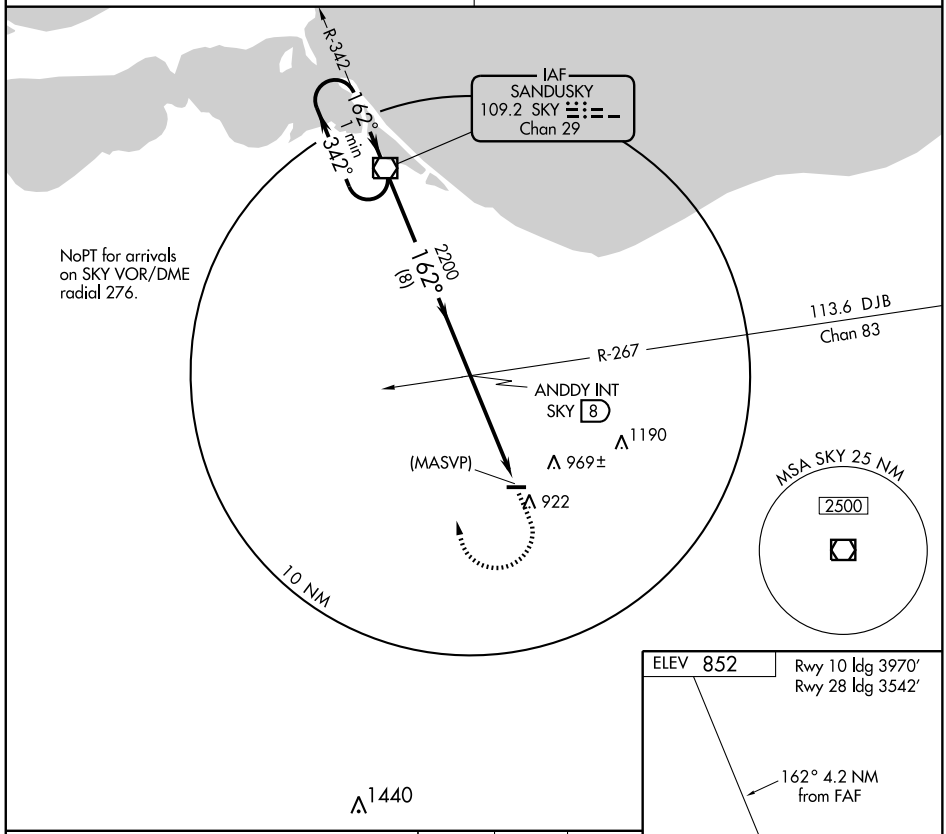
Use Cleveland-Hopkins altimeter setting.

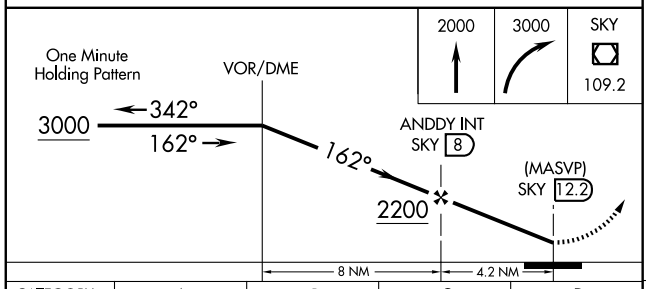
NA

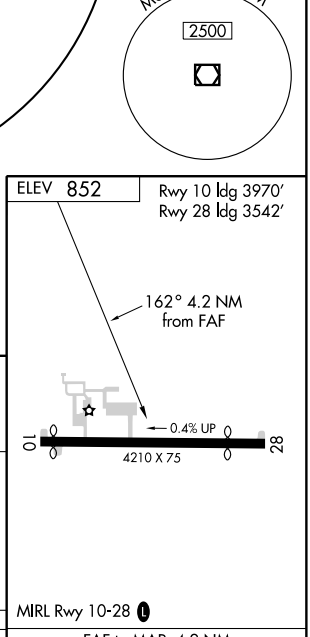
MISSED APPROACH: Climb to 2000, then climbing right turn to 3000 direct SKY VOR/DME and hold.

MANSFIELD APP CON ★
124.2 390.8

UNICOM
122.8 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	1400-1 548 (600-1)		1420-1½ 568 (600-1½)	1520-2 668 (700-2)

FAF to MAP 4.2 NM					
Knots	60	90	120	150	180
Min:Sec	4:12	2:48	2:06	1:41	1:24

EC-2. 14 JAN 2010 to 11 FEB 2010

WAAS CH 86514 W09A	APP CRS 095°	Rwy ldg 4427 TDZE 759 Apt Elev 764

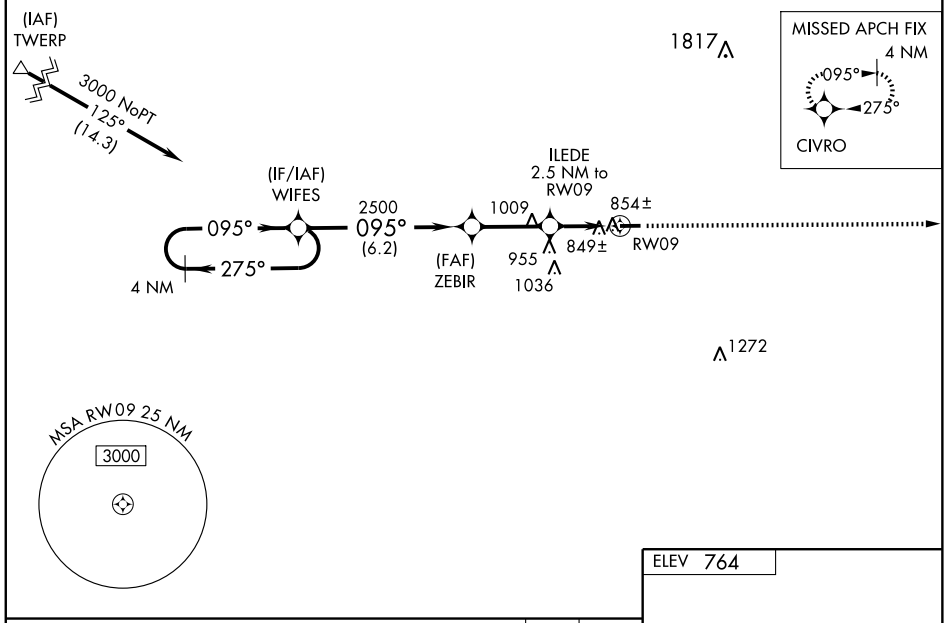
RNAV (GPS) RWY 9
OTTAWA / PUTNAM COUNTY (OWX)

Baro-VNAV NA when using Findlay altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). DME/DME RNP-0.3 NA.
NA Visibility reduction by helicopters NA. When local altimeter setting not received, use Findlay altimeter setting and increase all DA/MDA 40 feet, increase LPV all Cats visibility ¼ mile. VDP NA when using Findlay altimeter setting.

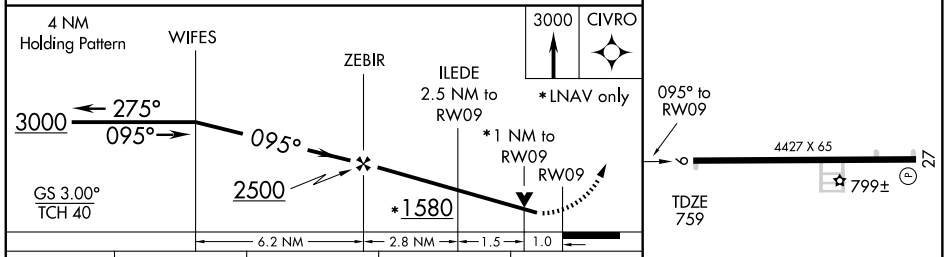
MISSED APPROACH: Climb to 3000 direct CIVRO and hold.

AWOS-3	TOLEDO APP CON	UNICOM
120.525	120.8 317.55	122.7 (CTAF) L

Procedure NA for arrivals at TWERP via V8-422 westbound and V96 westbound.



ELEV 764



CATEGORY	A	B	C	D
LPV DA	1047-1 288 (300-1)		NA	
LNAV/VNAV DA	1146-1½ 387 (400-1½)		NA	
LNAV MDA	1120-1 361 (400-1)		NA	
CIRCLING	1200-1 436 (500-1)	1220-1 456 (500-1)	NA	

REIL Rwys 9 and 27 L
HIRL Rwy 9-27 L

EC-2, 14 JAN 2010 to 11 FEB 2010

WAAS CH **97614** **W27A**	APP CRS **275°**	Rwy ldg **4427** TDZE **764** Apt Elev **764**

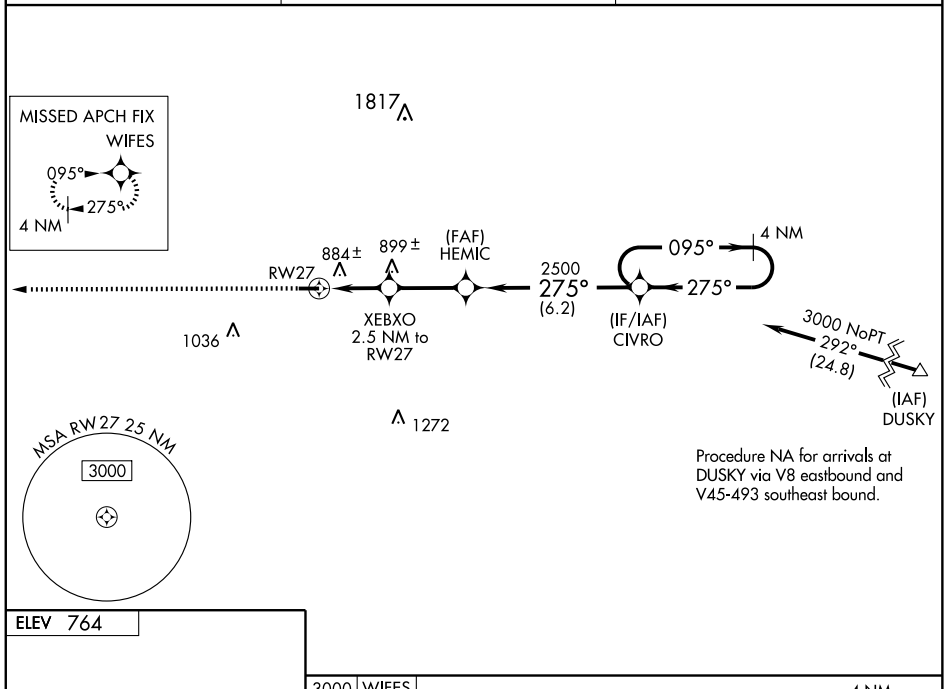
RNAV (GPS) RWY 27
OTTAWA / PUTNAM COUNTY (OWX)

Baro-VNAV NA when using Findlay altimeter setting. For uncompsated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Findlay altimeter setting and increase all DA/MDA 40 feet, increase LPV and LNAV/VNAV all Cats visibility ¼ mile. VDP NA when using Findlay altimeter setting.

NA

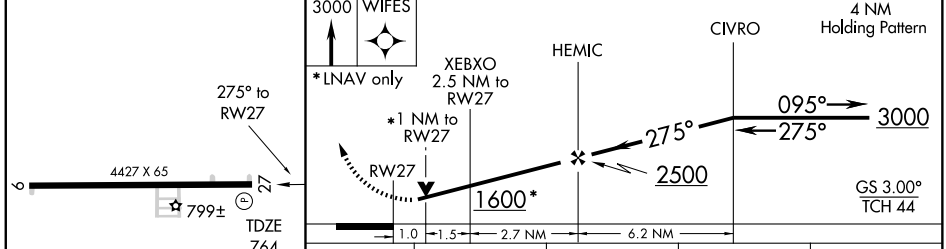
MISSED APPROACH: Climb to 3000 direct WIFES and hold.

AWOS-3	TOLEDO APP CON	UNICOM
120.525	**120.8 317.55**	**122.7** (CTAF) L



Procedure NA for arrivals at DUSKY via V8 eastbound and V45-493 southeast bound.

ELEV 764



CATEGORY	A	B	C	D
LPV DA	1049-1 285 (300-1)		NA	
LNAV/VNAV DA	1186-1½ 422 (500-1½)		NA	
LNAV MDA	1140-1 376 (400-1)		NA	
CIRCLING	1200-1 436 (500-1)	1220-1 456 (500-1)	NA	

REIL Rwys 9 and 27 L
HIRL Rwy 9-27 L

VORTAC FDY 108.2 Chan 19	APP CRS 298°	Rwy ldg 4427 TDZE 764 Apt Elev 764

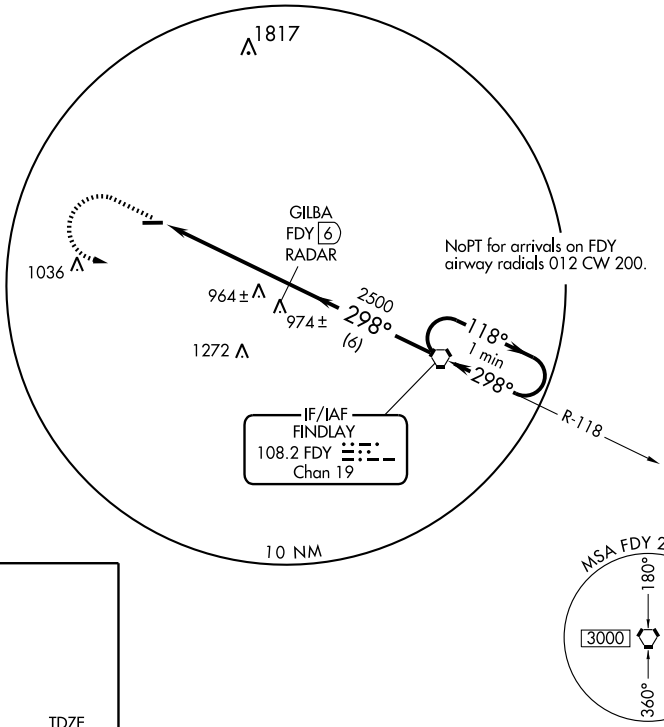
VOR RWY 27

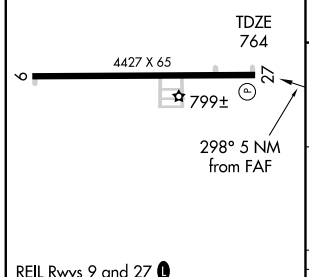
OTTAWA / PUTNAM COUNTY (OWX)

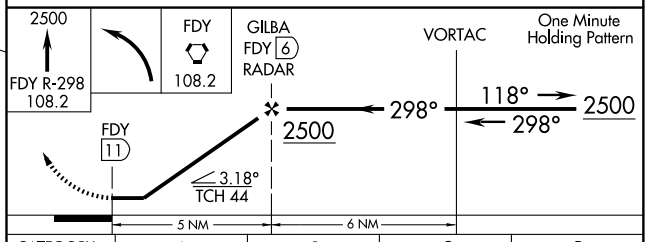
DME or Radar Required.
Visibility reduction by helicopters NA.
When local altimeter setting not received, use Findlay altimeter setting and increase all MDA 40 feet.
NA

MISSED APPROACH: Climb to 2500 via FDY VORTAC R-298, then left turn direct FDY VORTAC and hold.

AWOS-3	TOLEDO APP CON	UNICOM
120.525	120.8 317.55	122.7 (CTAF) L







REIL Rwys 9 and 27 L
HIRL Rwy 9-27 L

FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

CATEGORY	A	B	C	D
S-27	1220-1 456 (500-1)		NA	
CIRCLING	1220-1 456 (500-1)		NA	

EC-2. 14 JAN 2010 to 11 FEB 2010

NDB OXD 282	APP CRS 042°	Rwy ldg 3741 TDZE 1045 Apt Elev 1045

NDB or GPS RWY 5

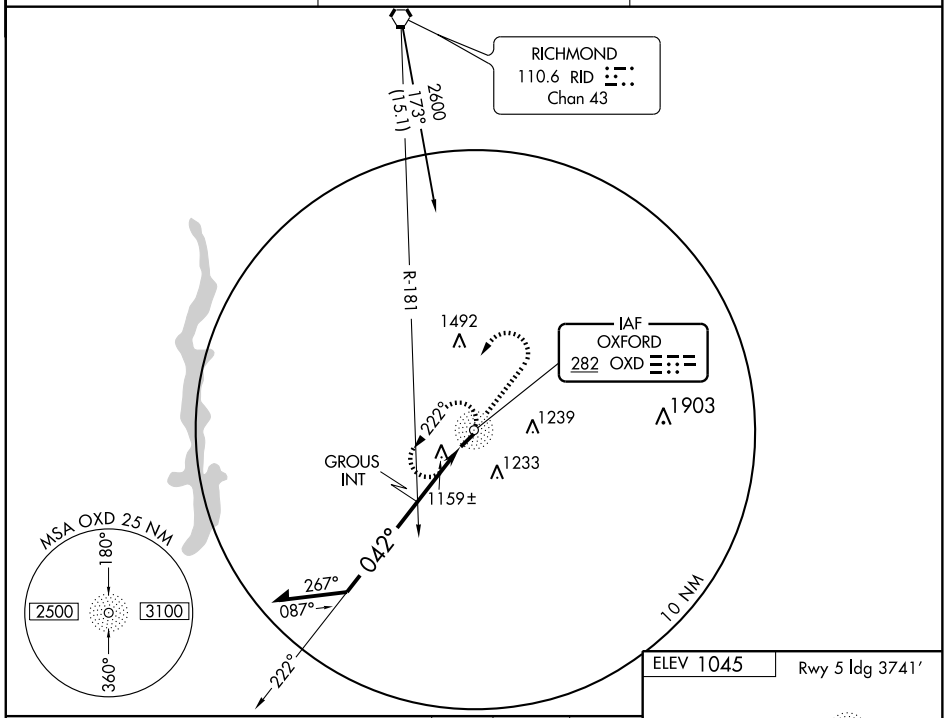
OXFORD / MIAMI UNIVERSITY (OXD)

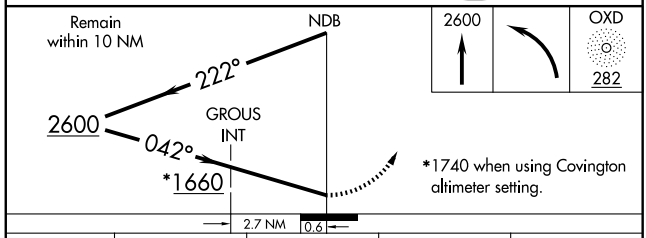
Obtain local altimeter setting on CTAF; when not received, use Covington/Cincinnati/Northern Kentucky altimeter setting and increase all MDAs 100 feet and all visibilities ¼ mile.

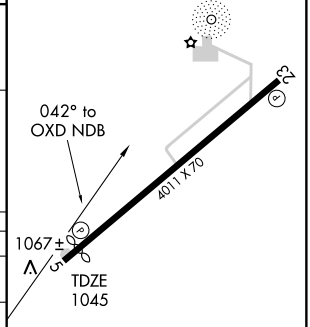
NA

MISSED APPROACH: Climb to 2600 then left turn direct OXD NDB and hold.

CINCINNATI APP CON	UNICOM	
121.0 257.725	122.8 (CTAF)	122.9 L







CATEGORY	A	B	C	D
S-5	1660-1 615 (700-1)		1660-1¾ 615 (700-1¾)	NA
CIRCLING	1660-1 615 (700-1)		1660-1¾ 615 (700-1¾)	NA
GROUS FIX MINIMUMS				
S-5	1460-1 415 (500-1)		1460-1¼ 415 (500-1¼)	NA
CIRCLING	1460-1 415 (500-1)	1500-1 455 (500-1)	1600-1½ 555 (600-1½)	NA

Knots	60	90	120	150	180
Min:Sec					

EC-2. 14 JAN 2010 to 11 FEB 2010

CLEVELAND DEP CON
125.35 346.32

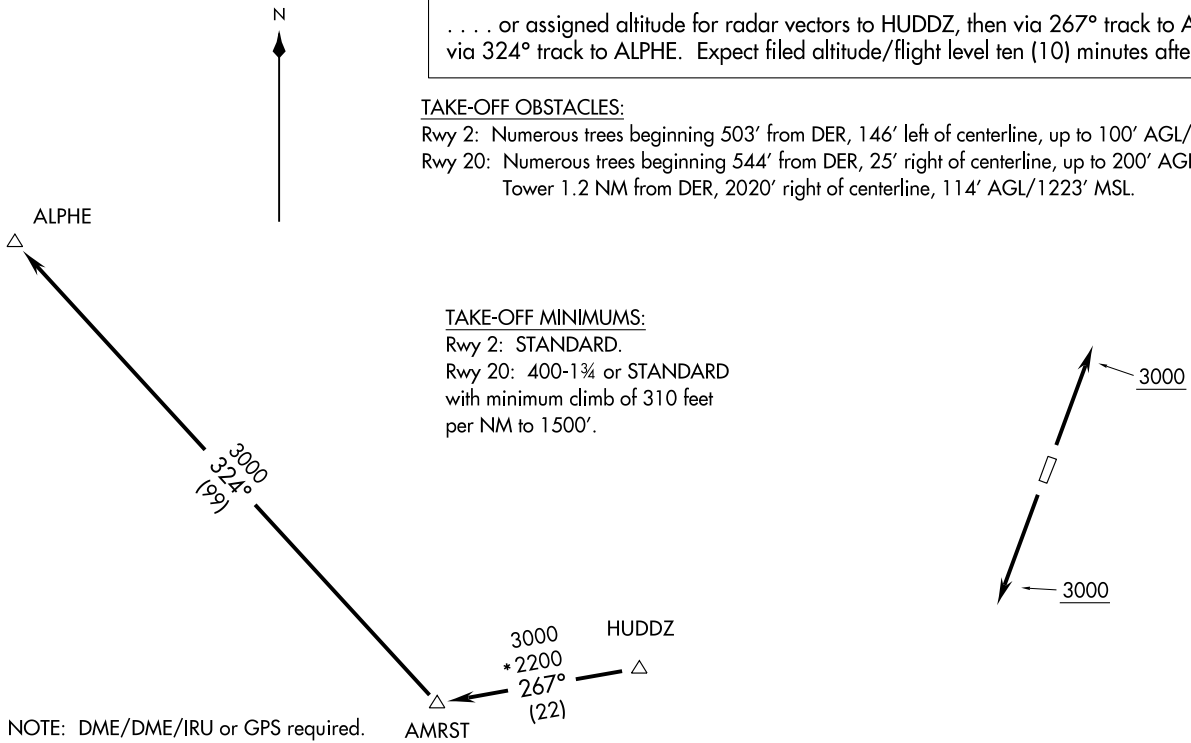
DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 2, 20: Climb via assigned heading to 3000 thence. . . .

. . . . or assigned altitude for radar vectors to HUDDZ, then via 267° track to AMRST, then via 324° track to ALPHE. Expect filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES:
Rwy 2: Numerous trees beginning 503′ from DER, 146′ left of centerline, up to 100′ AGL/1039′ MSL.
Rwy 20: Numerous trees beginning 544′ from DER, 25′ right of centerline, up to 200′ AGL/1349′ MSL.
Tower 1.2 NM from DER, 2020′ right of centerline, 114′ AGL/1223′ MSL.

TAKE-OFF MINIMUMS:
Rwy 2: STANDARD.
Rwy 20: 400-1¾ or STANDARD with minimum climb of 310 feet per NM to 1500′.



NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: RADAR REQUIRED.

NOTE: Chart not to scale.

(ALPHE2.ALPHE) 09127

ALPHE TWO DEPARTURE (RNAV)

SL-5432 (FAA)

PAINESVILLE / CONCORD AIRPARK (2G1)
PAINESVILLE, OHIO

CLEVELAND DEP CON
125.35 346.325

DEPARTURE ROUTE DESCRIPTION

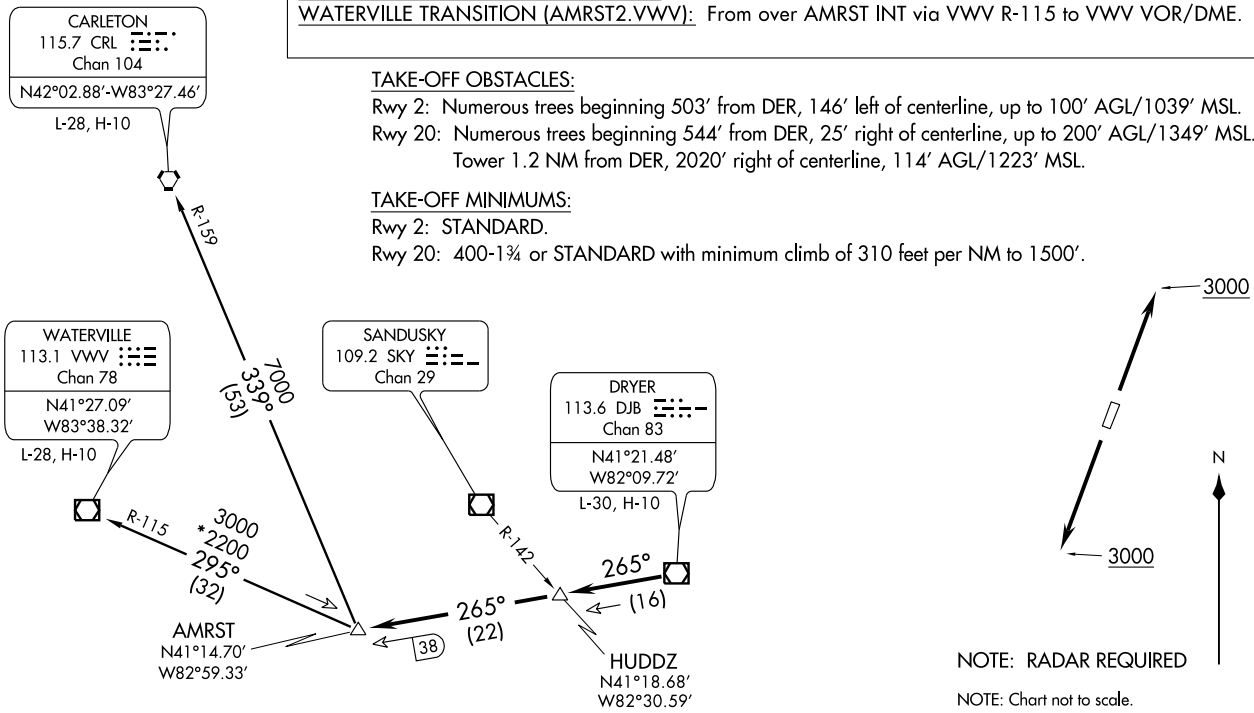
TAKE-OFF RUNWAYS 2, 20: Climb via assigned heading to 3000 thence. . . .

. . . . or assigned altitude for vectors to intercept the DJB VOR/DME R-265 to AMRST INT then via (Transition). Expect filed altitude/flight level ten (10) minutes after departure.

CARLETON TRANSITION (AMRST2.CRL): From over AMRST INT via CRL R-159 to CRL VORTAC.
WATERVILLE TRANSITION (AMRST2.VWV): From over AMRST INT via VWV R-115 to VWV VOR/DME.

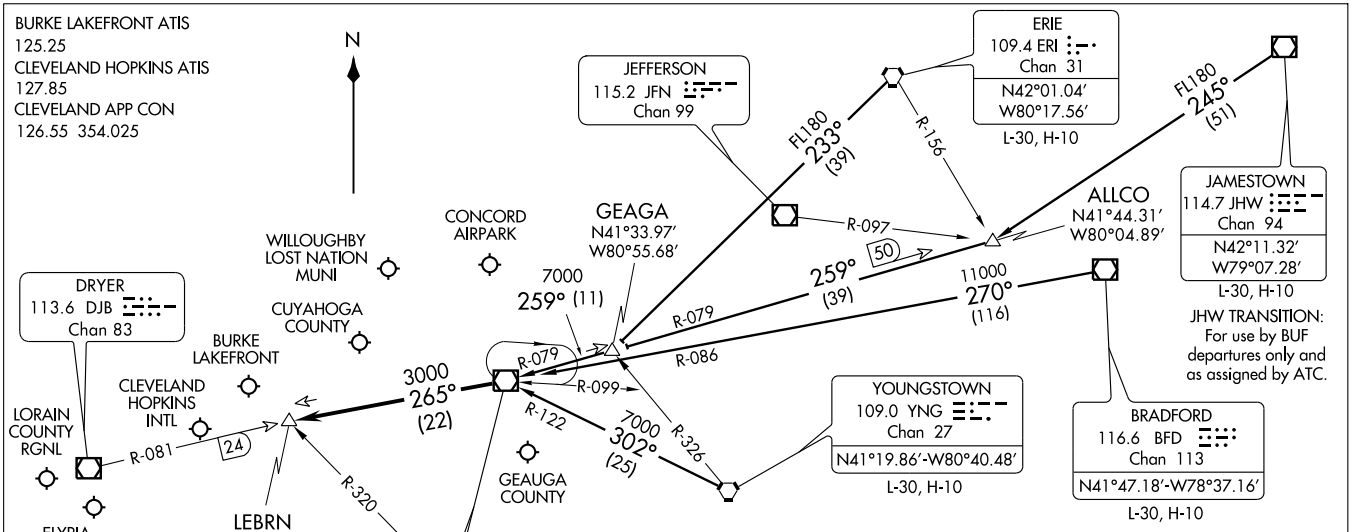
TAKE-OFF OBSTACLES:
Rwy 2: Numerous trees beginning 503′ from DER, 146′ left of centerline, up to 100′ AGL/1039′ MSL.
Rwy 20: Numerous trees beginning 544′ from DER, 25′ right of centerline, up to 200′ AGL/1349′ MSL.
Tower 1.2 NM from DER, 2020′ right of centerline, 114′ AGL/1223′ MSL.

TAKE-OFF MINIMUMS:
Rwy 2: STANDARD.
Rwy 20: 400-1¾ or STANDARD with minimum climb of 310 feet per NM to 1500′.



AMRST TWO DEPARTURE
(AMRST2.AMRST) 09183
SL-5432 (FAA)
PAINESVILLE / CONCORD AIRPARK (2G1)
PAINESVILLE, OHIO

CHARDON TWO ARRIVAL



VERTICAL NAVIGATION PLANNING INFORMATION

TURBOJETS: Expect clearance to cross at 10,000′ and 250 Kts.
PROPS: Expect clearance to cross at 9000′.

NOTE: RADAR Required.

NOTE: Chart not to scale.

ARRIVAL ROUTE DESCRIPTION

BRADFORD TRANSITION (BFD.CXR2): From over BFD VOR/DME via BFD R-270 and CXR R-086 to CXR VOR/DME. Thence . . . .

ERIE TRANSITION (ERI.CXR2): From over ERI VORTAC via ERI R-233 to GEAGA INT, then via CXR R-079 to CXR VOR/DME. Thence . . . .

JAMESTOWN TRANSITION (JHW.CXR2): (For use by BUF departures only and as assigned by ATC) From over JHW VOR/DME via JHW R-245 to ALLCO INT, then via CXR R-079 to CXR VOR/DME. Thence . . . .

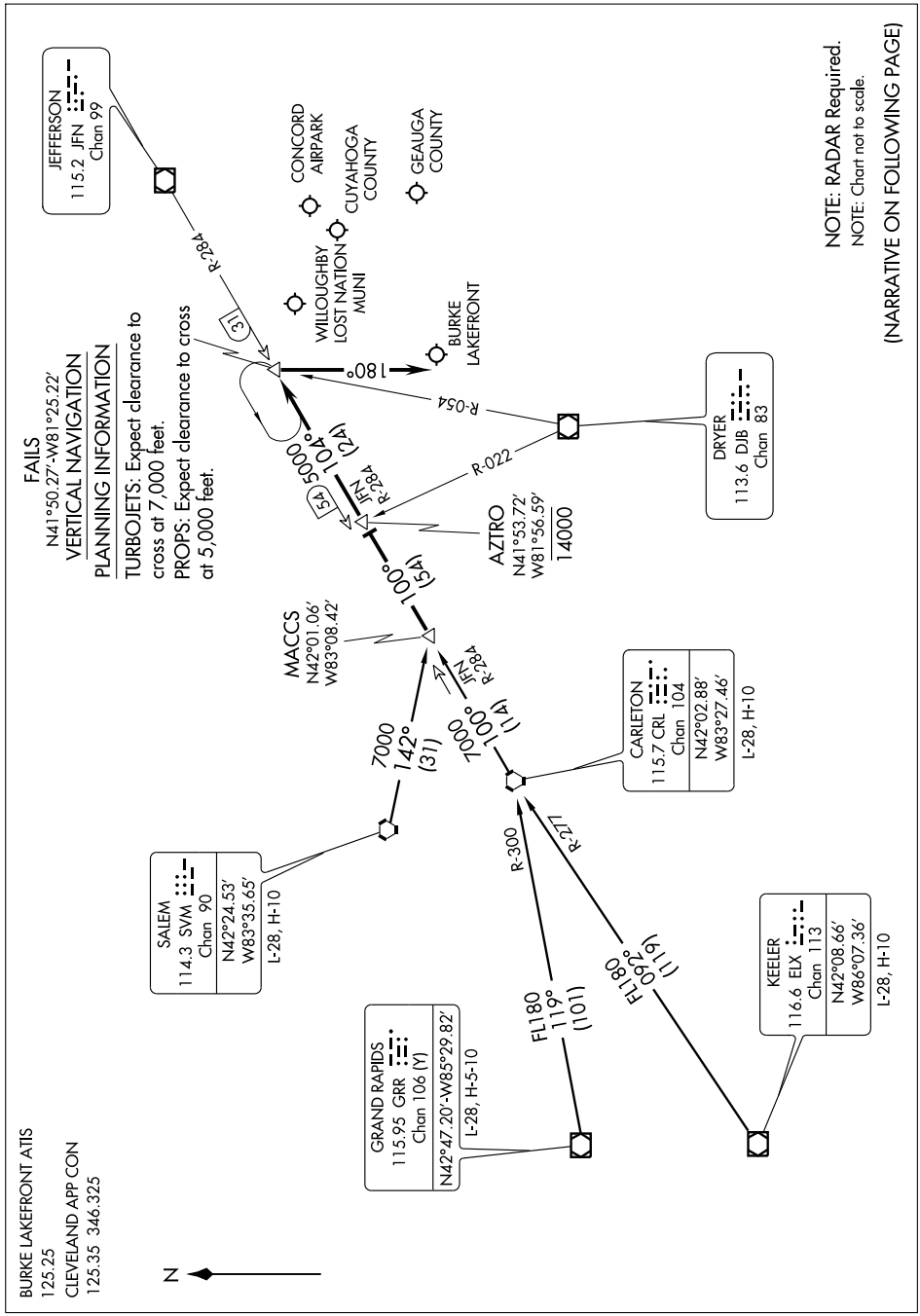
YOUNGSTOWN TRANSITION (YNG.CXR2): From over YNG VORTAC via YNG R-302 and CXR R-122 to CXR VOR/DME. Thence . . . .

. . . . From CXR VOR/DME via R-265 to LEBRN INT, expect vectors to final approach course.

FAILS ONE ARRIVAL

ST-5370 (FAA)

CLEVELAND, OHIO



ARRIVAL ROUTE DESCRIPTION

CARLETON TRANSITION (CRL.FAILS1): From over CRL VORTAC via CRL R-100 and JFN R-284 to MACCS INT. Thence. . . .
GRAND RAPIDS TRANSITION (GRR.FAILS1): From over GRR VOR/DME via GRR R-119 and CRL R-300 to CRL VORTAC, then via CRL R-100 and JFN R-284 to MACCS INT. Thence. . . .
KEELER TRANSITION (ELX.FAILS1): From over ELX VOR/DME via ELX R-092 and CRL R-277 to CRL VORTAC, then via CRL R-100 and JFN R-284 to MACCS INT. Thence. . . .
SALEM TRANSITION (SVM.FAILS1): From over SVM VORTAC via heading 142° to MACCS INT. Thence. . . .

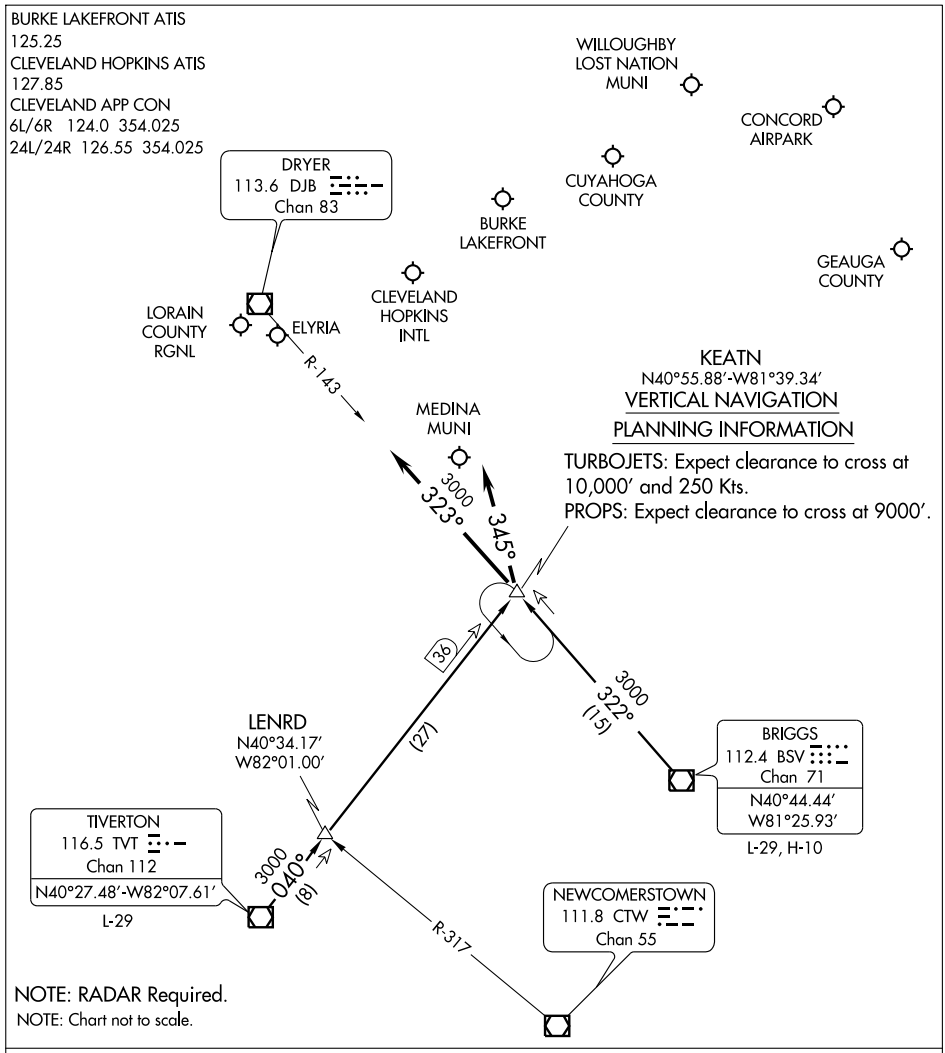
. . . . From over MACCS INT, via CRL VORTAC R-100 to AZTRO INT, then via JFN VOR/DME R-284 to FAILS INT. From FAILS fly heading 180°.
Expect radar vectors to final approach course.

EC-2, 14 JAN 2010 to 11 FEB 2010

KEATN FOUR ARRIVAL

ST-84 (FAA)

CLEVELAND, OHIO



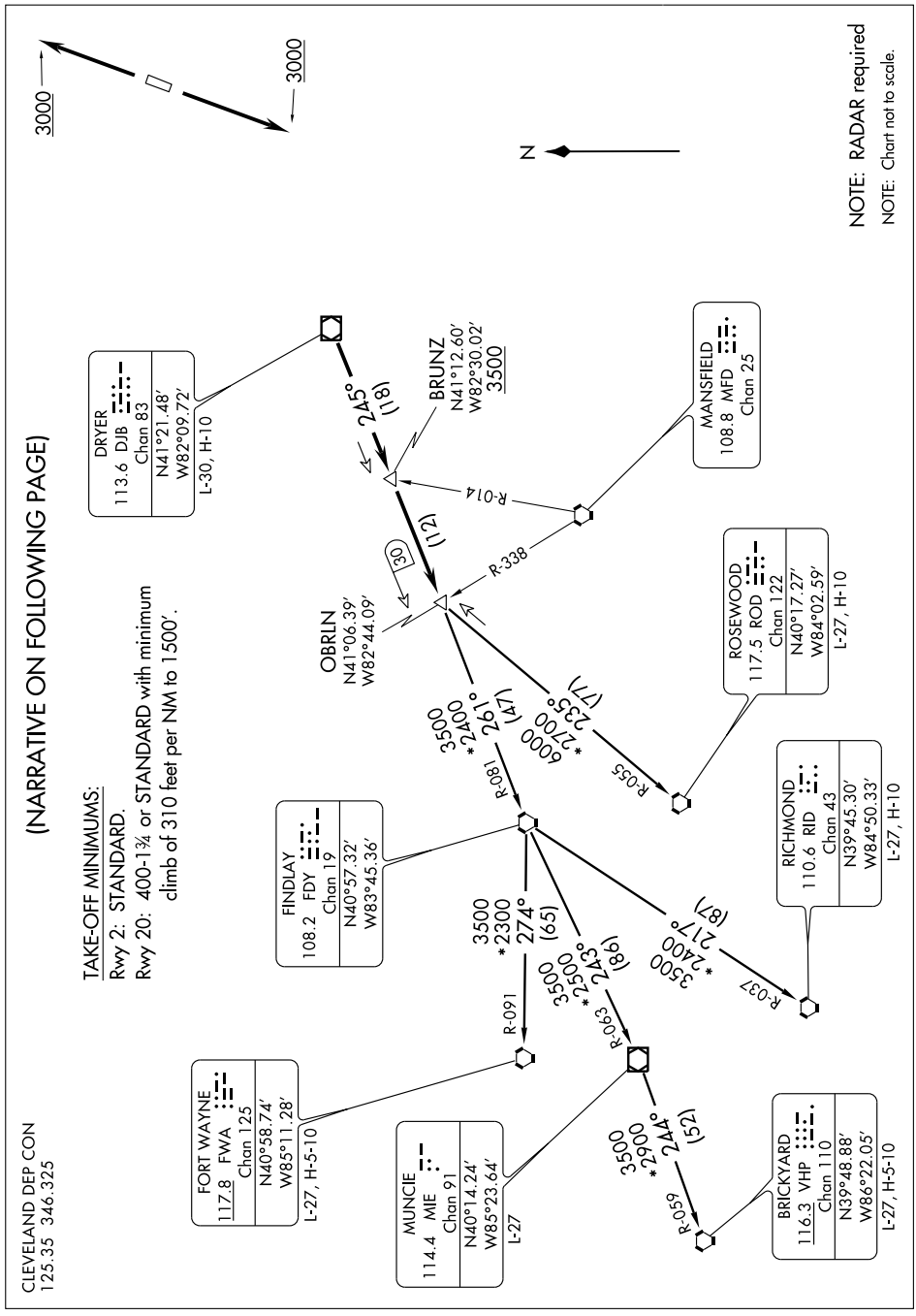
ARRIVAL ROUTE DESCRIPTION

BRIGGS TRANSITION (BSV.KEATN4): From over BSV VOR/DME via BSV R-322 to KEATN INT. Thence. . . .
TIVERTON TRANSITION (TVT.KEATN4): From over TVT VOR/DME via TVT R-040 to KEATN INT. Thence. . . .

LANDING CLE RWY 24L/R: . . . .Depart KEATN INT heading 345°. Expect radar vectors to final approach course.
LANDING CLE RWY 6L/R: . . . .Depart KEATN INT via DJB R-143 to DJB VOR/DME. Expect radar vectors to final approach course.
LANDING ALL OTHER AIRPORTS: . . . .From KEATN INT expect radar vectors to final approach course.

EC-2, 14 JAN 2010 to 11 FEB 2010

OBRLN TWO DEPARTURE



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 2, 20: Climb via assigned heading to 3000, thence. . . .

. . . . or assigned altitude for vectors to intercept DJB VOR/DME R-245, cross BRUNZ INT at or above 3500 then proceed to OBRLN INT then via (transition). Expect filed altitude/flight level ten (10) minutes after departure.

BRICKYARD TRANSITION (OBRLN2.VHP): From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-243 and MIE R-063 to MIE VOR/DME, then via MIE R-244 and VHP R-059 to VHP VORTAC.
FORT WAYNE TRANSITION (OBRLN2.FWA): (For use by Fort Wayne arrivals only and ATC use as assigned.) From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-274 and FWA R-091 to FWA VORTAC.
MUNCIE TRANSITION (OBRLN2.MIE): (For use by Indianapolis arrivals only and ATC use as assigned). From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-243 and MIE R-063 to MIE VOR/DME.
RICHMOND TRANSITION (OBRLN2.RID): From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-217 and RID R-037 to RID VORTAC.
ROSEWOOD TRANSITION (OBRLN2.ROD): (For use at or below FL220 only and ATC use as assigned). From over OBRLN INT via ROD R-055 to ROD VORTAC.

TAKE-OFF OBSTACLES:
Rwy 2: Numerous trees beginning 503′ from DER, 146′ left of centerline, up to 100′ AGL/1039′ MSL.
Rwy 20: Numerous trees beginning 544′ from DER, 25′ right of centerline, up to 200′ AGL/1349′ MSL.
Tower 1.2 NM from DER, 2020′ right of centerline, 114′ AGL/1223′ MSL.

EC-2, 14 JAN 2010 to 11 FEB 2010

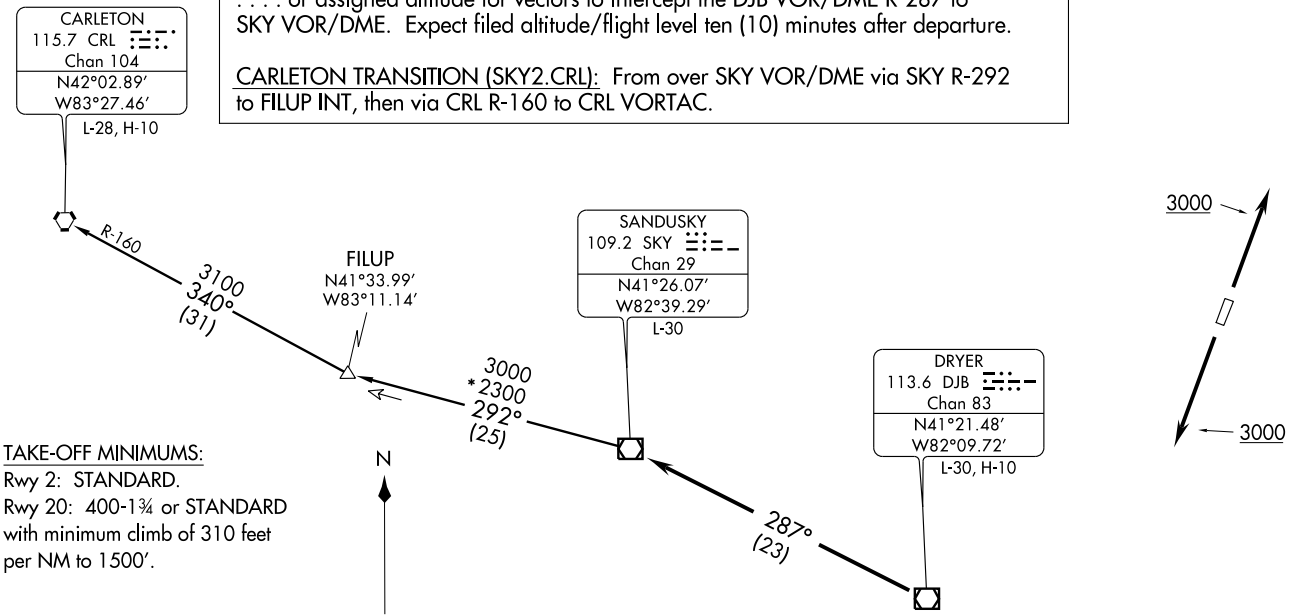
CLEVELAND DEP CON
125.35 346.325

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAYS 2, 20: Climb via assigned heading to 3000 thence . . . .

. . . . or assigned altitude for vectors to intercept the DJB VOR/DME R-287 to SKY VOR/DME. Expect filed altitude/flight level ten (10) minutes after departure.

CARLETON TRANSITION (SKY2.CRL): From over SKY VOR/DME via SKY R-292 to FILUP INT, then via CRL R-160 to CRL VORTAC.



TAKE-OFF MINIMUMS:
Rwy 2: STANDARD.
Rwy 20: 400-1¾ or STANDARD with minimum climb of 310 feet per NM to 1500′.

TAKE-OFF OBSTACLES:
Rwy 2: Numerous trees beginning 503′ from DER, 146′ left of centerline, up to 100′ AGL/1039′ MSL.
Rwy 20: Numerous trees beginning 544′ from DER, 25′ right of centerline, up to 200′ AGL/1349′ MSL.
Tower 1.2 NM from DER, 2020′ right of centerline, 114′ AGL/1223′ MSL.

NOTE: RADAR required
NOTE: Turboprop aircraft only
NOTE: Chart not to scale.

(SKY2.SKY) 09183

SANDUSKY TWO DEPARTURE

SL-5432 (FAA)

PAINESVILLE / CONCORD AIRPARK (2G1)
PAINESVILLE, OHIO

VOR/DME CXR	APP CRS	Rwy ldg	N/A
112.7	355°	TDZE	N/A
Chan 74		Apt Elev	999

VOR or GPS-A

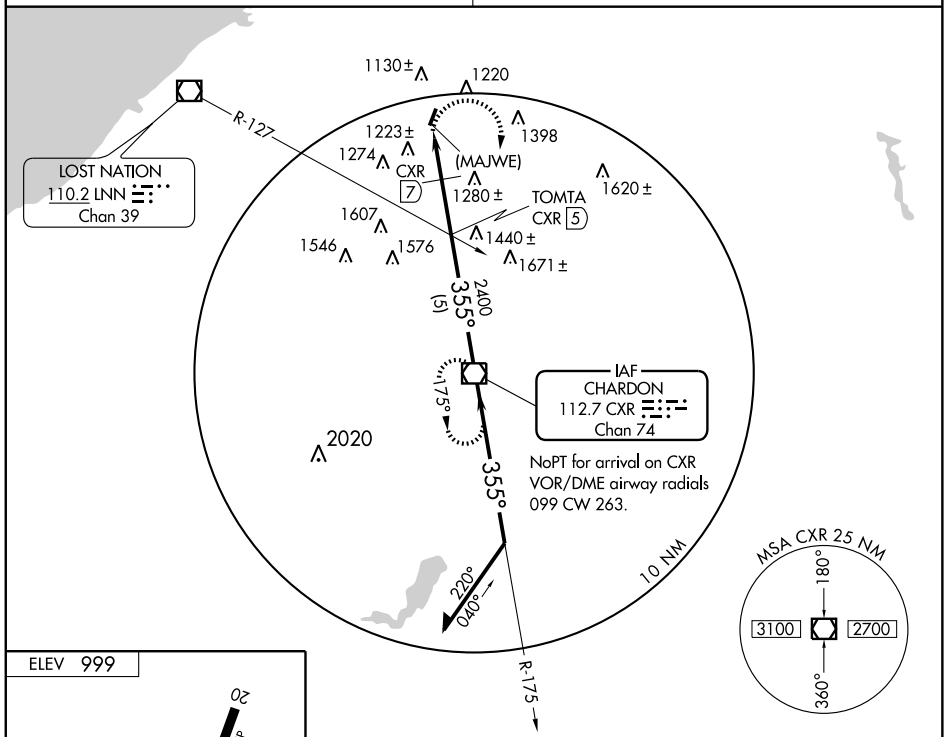
PAINESVILLE/ CONCORD AIRPARK (2G1)

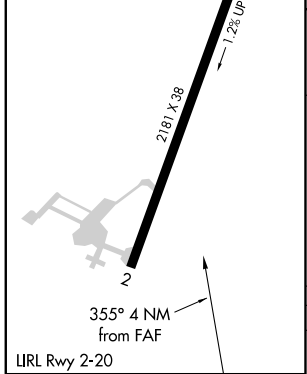
Procedure not authorized at night.
NA Use Cleveland-Hopkins altimeter setting.

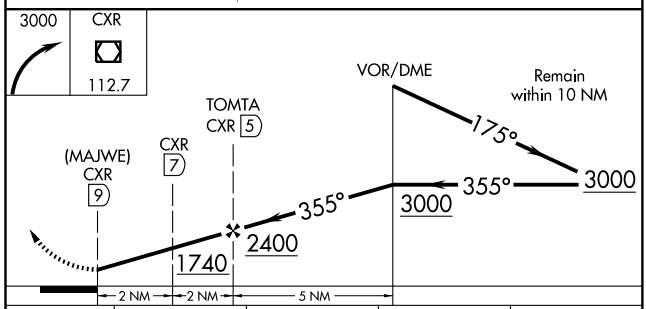
MISSED APPROACH: Climbing right turn to 3000 direct CXR VOR/DME and hold.

CLEVELAND APP CON
125.35 354.025

UNICOM
122.8 (CTAF)







FAF to MAP 4 NM					
Knots	60	90	120	150	180
Min:Sec	4:00	2:40	2:00	1:36	1:20

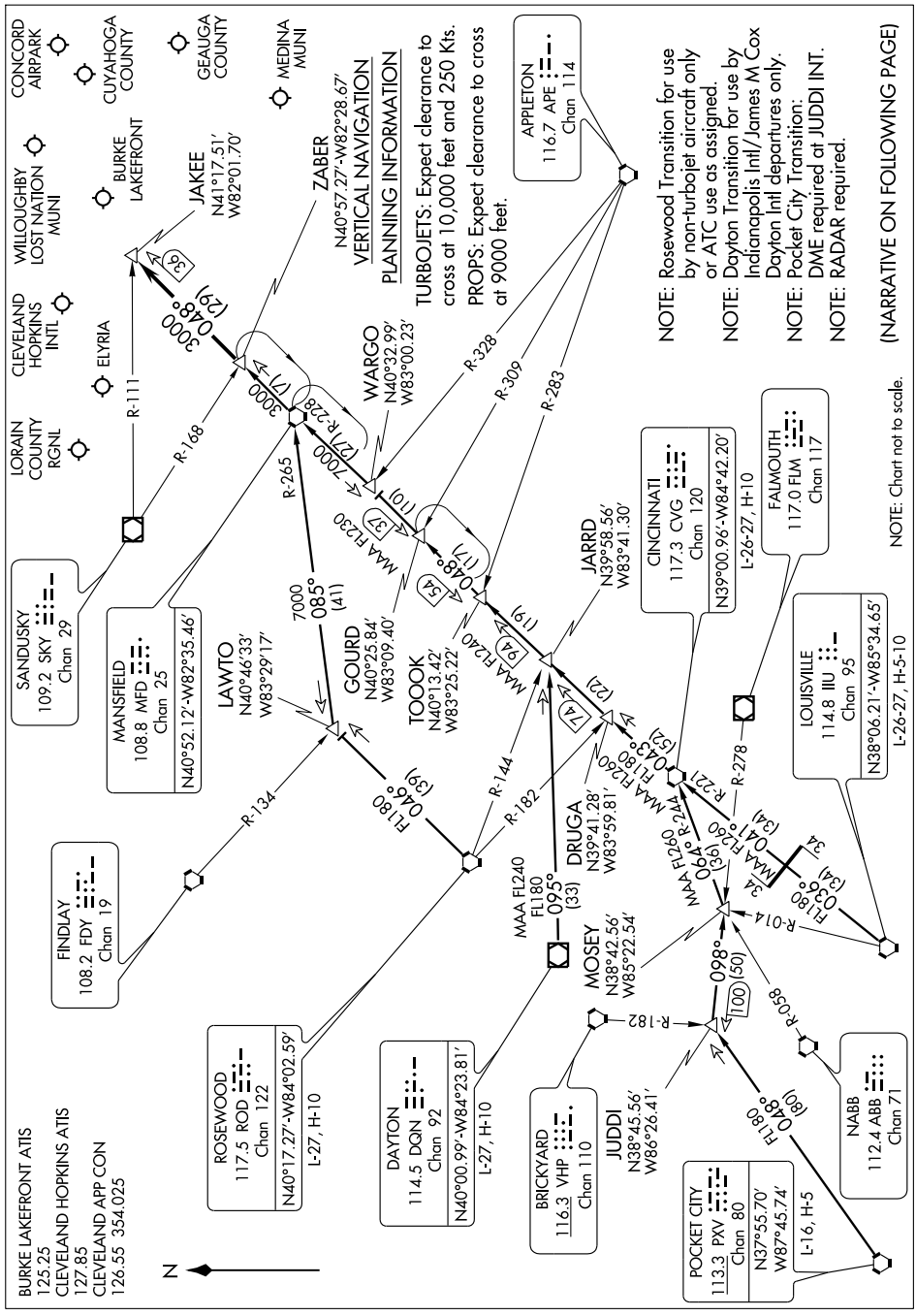
CATEGORY	A	B	C	D
CIRCLING	1740-1 741 (800-1)	1740-1¼ 741 (800-1¼)	1740-2¼ 741 (800-2¼)	NA
DME MINIMUMS				
CIRCLING	1640-1 641 (700-1)		1640-1¾ 641 (700-1¾)	NA

EC-2, 14 JAN 2010 to 11 FEB 2010

ZABER ONE ARRIVAL

ST-84 (FAA)

CLEVELAND, OHIO



ARRIVAL ROUTE DESCRIPTION

CINCINNATI TRANSITION (CVG.ZABER1): From over CVG VORTAC via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

DAYTON TRANSITION (DQN.ZABER1): (For use by INDIANAPOLIS INTL/JAMES M COX DAYTON INTL departures only). From over DQN VOR/DME via DQN R-095 to JARRD INT, then via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

LOUISVILLE TRANSITION (IIU.ZABER1): From over IIU VORTAC via IIU R-036 and CVG R-221 to CVG VORTAC, then via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

POCKET CITY TRANSITION (PXV.ZABER1): (DME REQUIRED at JUDDI INT) From over PXV VORTAC via PXV R-048 to JUDDI INT, then via FLM R-278 to MOSEY INT, then via CVG R-244 to CVG VORTAC, then via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

ROSEWOOD TRANSITION (ROD.ZABER1): (For use by non-turbo aircraft only or ATC use as assigned). From over ROD VORTAC via ROD R-046 to LAWTO INT, then via MFD R-265 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

. . . . From over ZABER INT via MFD R-048 to JAKEE INT. Expect radar vectors to final approach course.

EC-2, 14 JAN 2010 to 11 FEB 2010

VOR/DME DQN	APP CRS	Rwy ldg	3000
114.5	182°	TDZE	1031
Chan 92		Apt Elev	1031

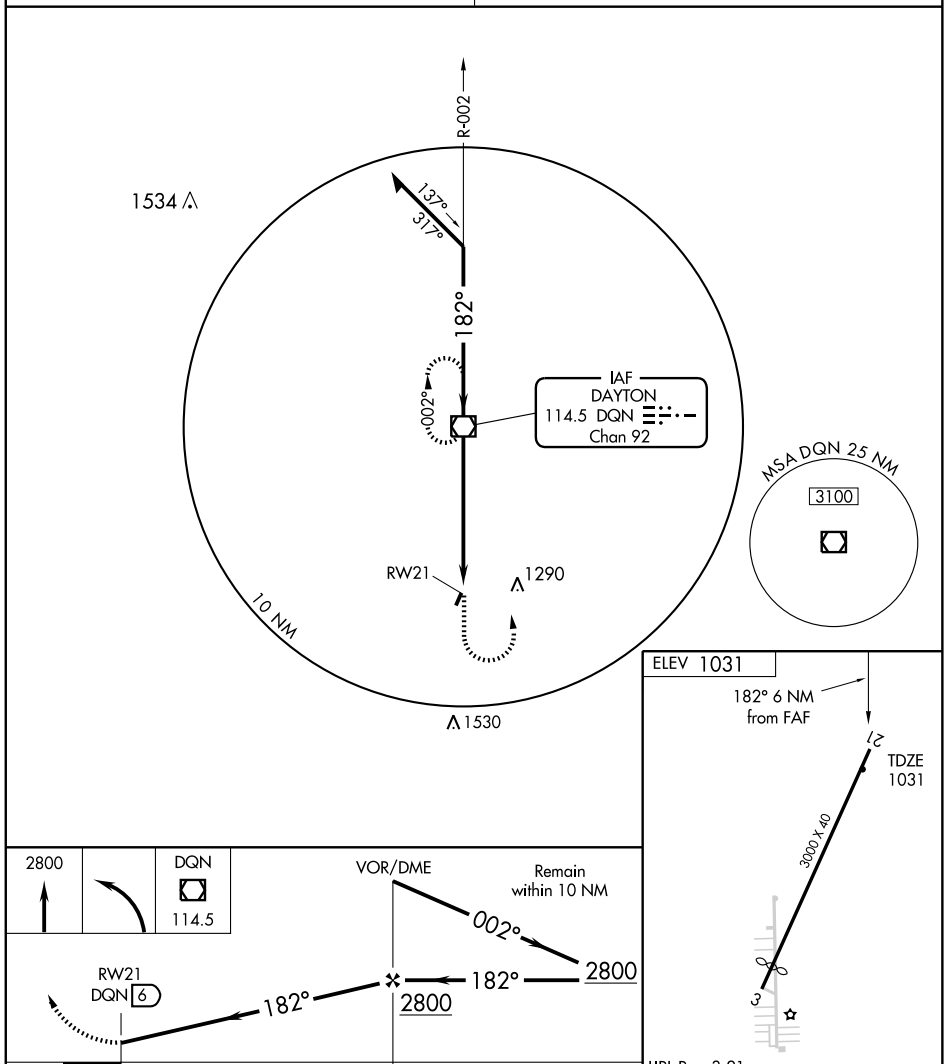
VOR or GPS RWY 21
PHILLIPSBURG (3I7)

NA

Use Dayton Intl altimeter setting.

MISSED APPROACH: Climb to 2800 then left turn direct DQN VOR/DME and hold.

DAYTON APP CON	UNICOM
134.45 352.05	122.7 (CTAF)



CATEGORY	A	B	C	D
S-21	1420-1 389 (400-1)			NA
CIRCLING	1540-1 509 (600-1)		1540-1½ 509 (600-1½)	NA

FAF to MAP 6 NM					
Knots	60	90	120	150	180
Min:Sec	6:00	4:00	3:00	2:24	2:00

APP CRS	Rwy ldg	3997
081°	TDZE	994
	Apt Elev	994

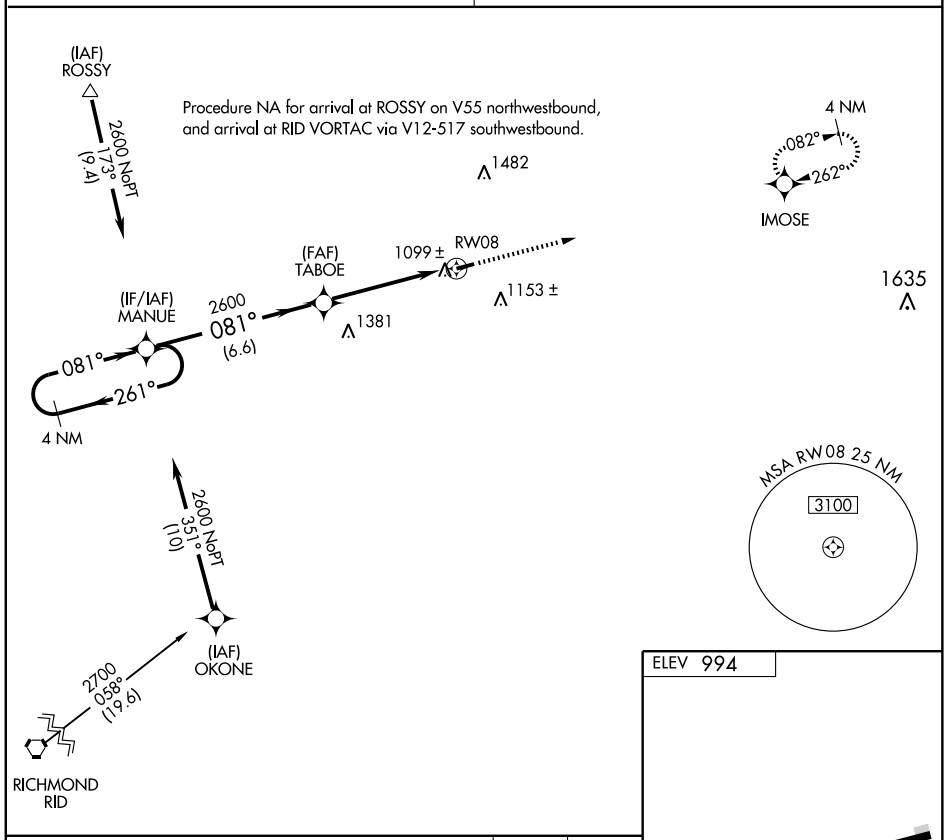
RNAV (GPS) RWY 8
PIQUA AIRPORT-HARTZELL FIELD (I17)

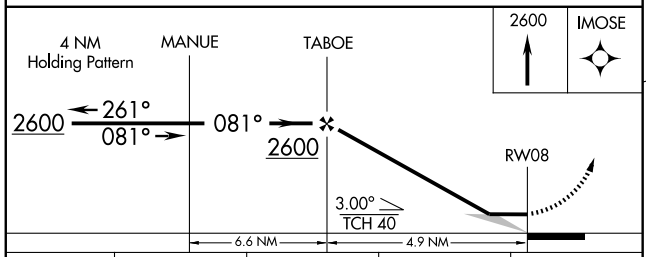
NA

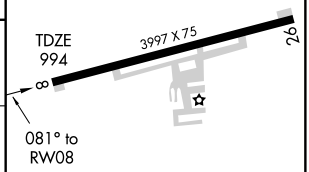
Use James M. Cox Dayton Intl altimeter setting.
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2600 direct IMOSE WP and hold.

DAYTON APP CON	UNICOM
118.425 134.45 294.5 352.05	123.0 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	1400-1	406 (500-1)	1400-1¼	406 (500-1¼)
CIRCLING	1440-1 446 (500-1)	1460-1 466 (500-1)	1460-1½ 466 (500-1½)	1560-2 566 (600-2)

MIRL Rwy 8-26 L
REIL Rwys 8 and 26 L

EC-2, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	3997
262°	TDZE	987
	Apt Elev	994

RNAV (GPS) RWY 26
PIQUA AIRPORT-HARTZELL FIELD (I17)

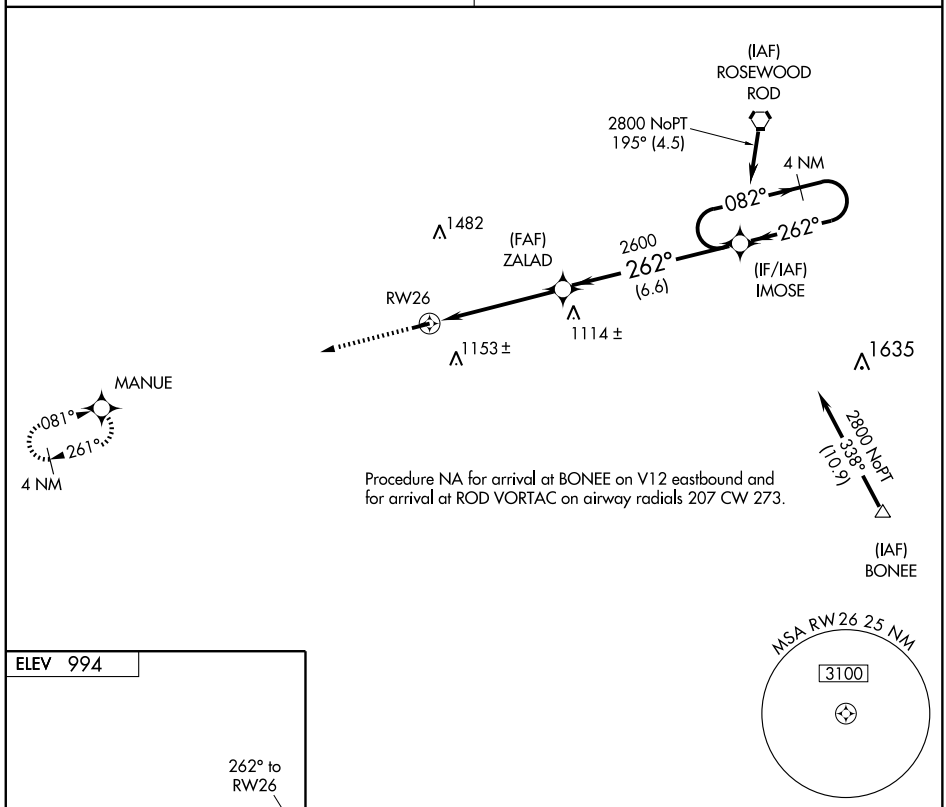
NA

Use James M. Cox Dayton Intl altimeter setting.
DME/DME RNP-0.3 NA.

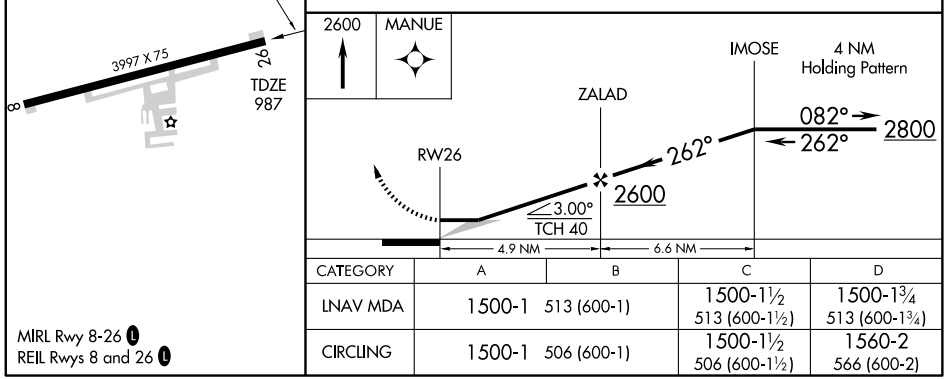
MISSED APPROACH: Climb to 2600 direct MANUE WP and hold.

DAYTON APP CON
118.425 134.45 294.5 352.05

UNICOM
123.0 (CTAF) L



Procedure NA for arrival at BONEE on V12 eastbound and for arrival at ROD VORTAC on airway radials 207 CW 273.



CATEGORY	A	B	C	D
LNAV MDA	1500-1 513 (600-1)		1500-1½ 513 (600-1½)	1500-1¾ 513 (600-1¾)
CIRCLING	1500-1 506 (600-1)		1500-1½ 506 (600-1½)	1560-2 566 (600-2)

MIRL Rwy 8-26 L
REIL Rwys 8 and 26 L

VOR/DME DQN 114.5 Chan 92	APP CRS 025°	Rwy ldg N/A TDZE N/A Apt Elev 994

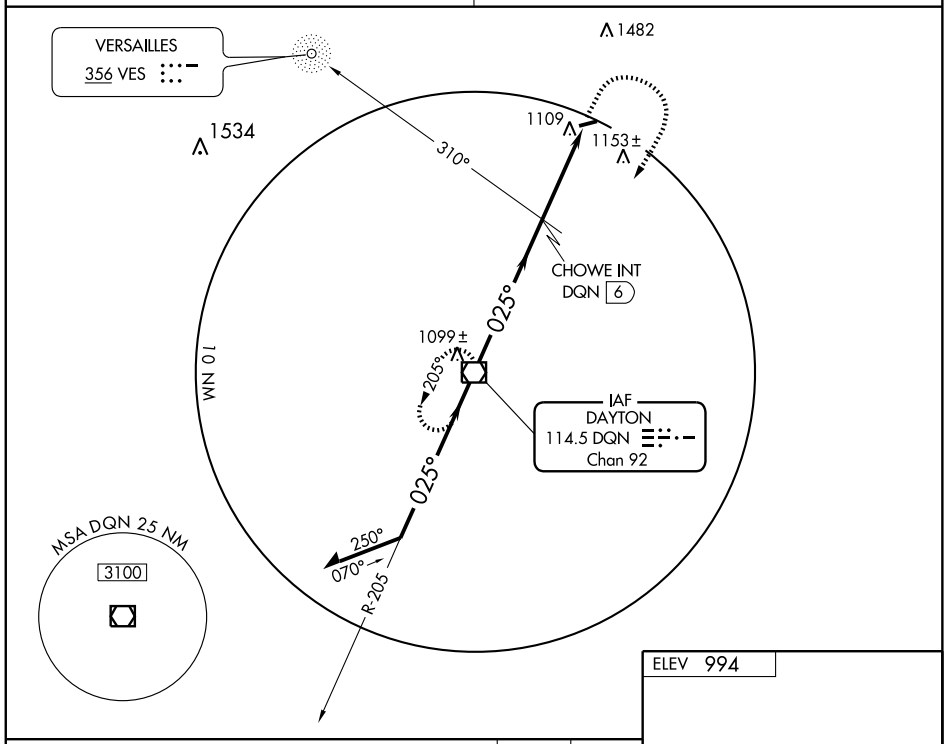
VOR-A

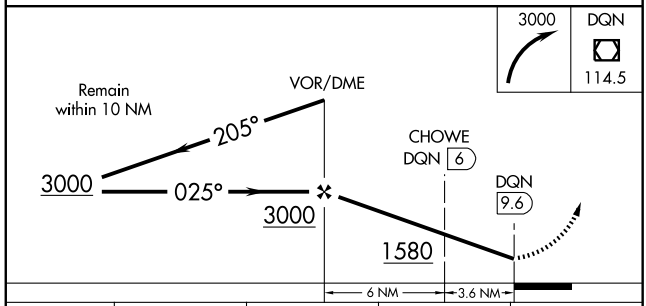
PIQUA AIRPORT-HARTZELL FIELD (I17)

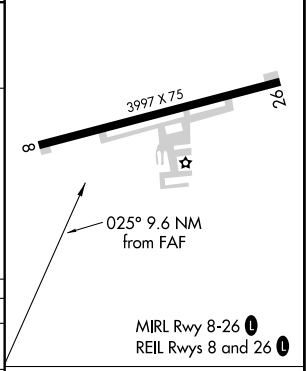
NA Use James M. Cox Dayton Intl altimeter setting.

MISSED APPROACH: Climbing right turn to 3000 direct DQN VOR/DME and hold.

DAYTON APP CON	UNICOM
118.425 134.45 294.5 352.05	123.0 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	1580-1 586 (600-1)		1580-1½ 586 (600-1½)	1580-2 586 (600-2)
CHOWE FIX MINIMUMS				
CIRCLING	1460-1 466 (500-1)		1460-1½ 466 (500-1½)	1560-2 566 (600-2)

FAF to MAP 9.6 NM

Knots	60	90	120	150	180
Min:Sec	9:36	6:24	4:48	3:50	3:12

EC-2. 14 JAN 2010 to 11 FEB 2010

VORTAC ROD	APP CRS	Rwy ldg	3997
117.5	243°	TDZE	987
Chan 122		Apt Elev	994

VOR RWY 26

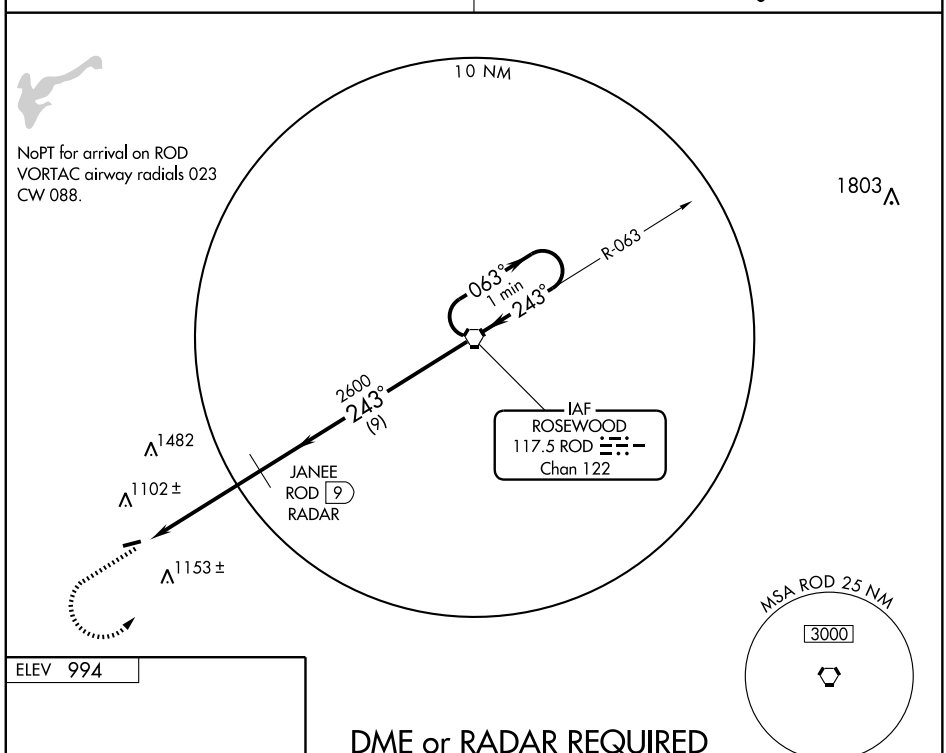
PIQUA AIRPORT-HARTZELL FIELD (I17)

NA Use James M. Cox Dayton Intl altimeter setting.

MISSED APPROACH: Climb to 3000 then left turn direct ROD VORTAC and hold.

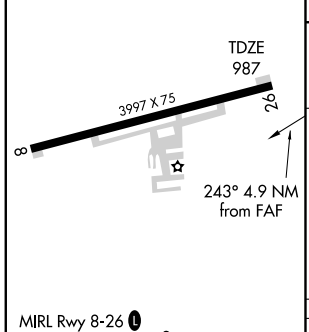
DAYTON APP CON
118.425 134.45 294.5 352.05

UNICOM
123.0 (CTAF) L



EC-2, 14 JAN 2010 to 11 FEB 2010

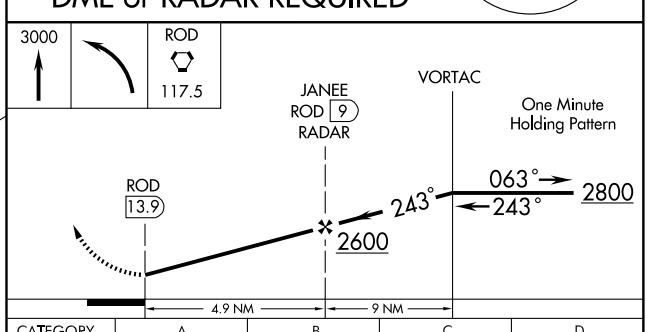
ELEV 994



MIRL Rwy 8-26 L
REIL Rwys 8 and 26 L

FAF to MAP 4.9 NM					
Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38

DME or RADAR REQUIRED



CATEGORY	A	B	C	D
S-26	1500-1 513 (600-1)		1500-1½ 513 (600-1½)	1500-1¾ 513 (600-1¾)
CIRCLING	1500-1 506 (600-1)		1500-1½ 506 (600-1½)	1560-2 565 (600-2)

NDB PCW	APP CRS	Rwy ldg	5445
423	276°	TDZE	588
		Apt Elev	590

NDB RWY 27

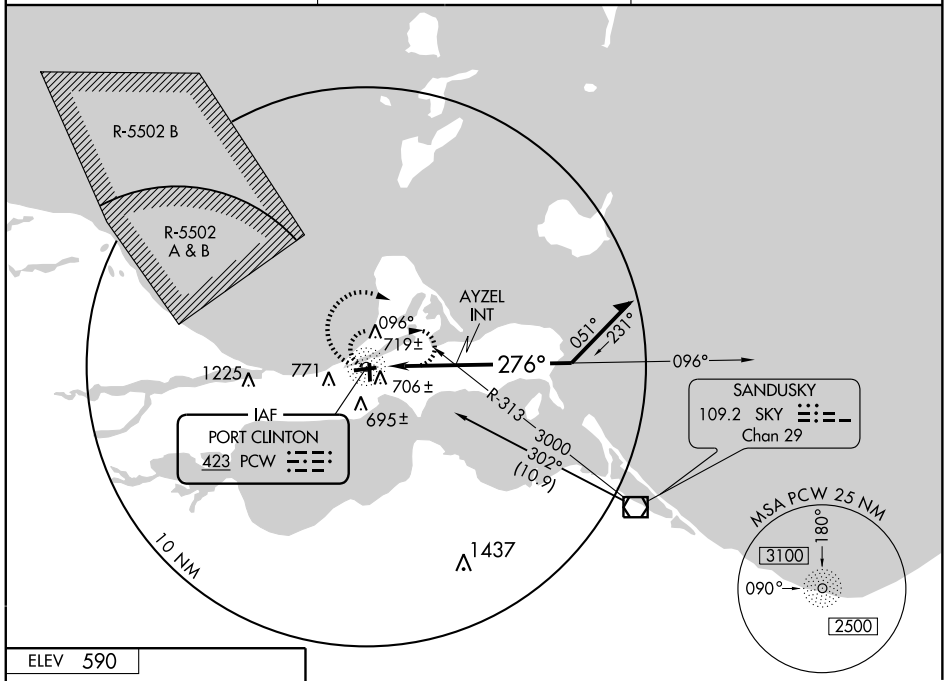
PORT CLINTON / CARL R. KELLER FIELD (PCW)

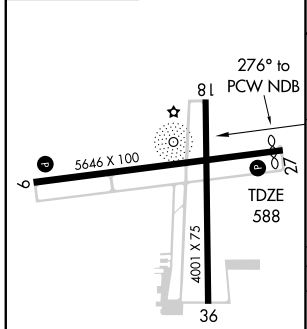
NA

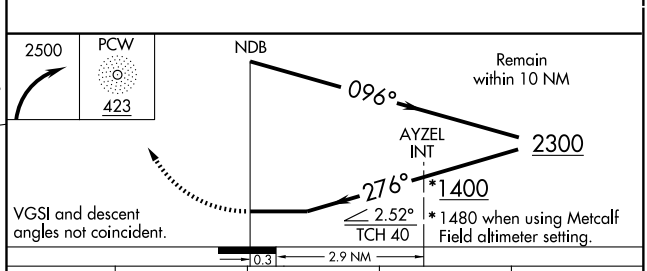
Visibility reduction by helicopters NA.
When local altimeter setting not received, use Metcalf Field altimeter setting and increase all MDA 80 feet and all visibilities ¼ mile.

MISSED APPROACH: Climbing right turn to 2500 in PCW NDB holding pattern.

AWOS-3	CLEVELAND APP CON	UNICOM
118.775	126.35 354.025	122.8 (CTAF) L







CATEGORY	A	B	C	D
S-27	1400-1 812 (900-1)	1400-1¼ 812 (900-1¼)	1400-2½ 812 (900-2½)	1400-2¾ 812 (900-2¾)
CIRCLING	1400-1 810 (900-1)	1400-1¼ 810 (900-1¼)	1400-2½ 810 (900-2½)	1400-2¾ 810 (900-2¾)
AYZEL FIX MINIMUMS				
S-27	1060-1	472 (500-1)	1060-1¼ 472 (500-1¼)	1060-1½ 472 (500-1½)
CIRCLING	1140-1	550 (600-1)	1140-1½ 550 (600-1½)	1140-2 550 (600-2)

MIRL Rwys 9-27 and 18-36 L
REIL Rwys 9 and 27 L

EC-2. 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	5646
090°	TDZE	590
	Apt Elev	590

RNAV (GPS) RWY 9

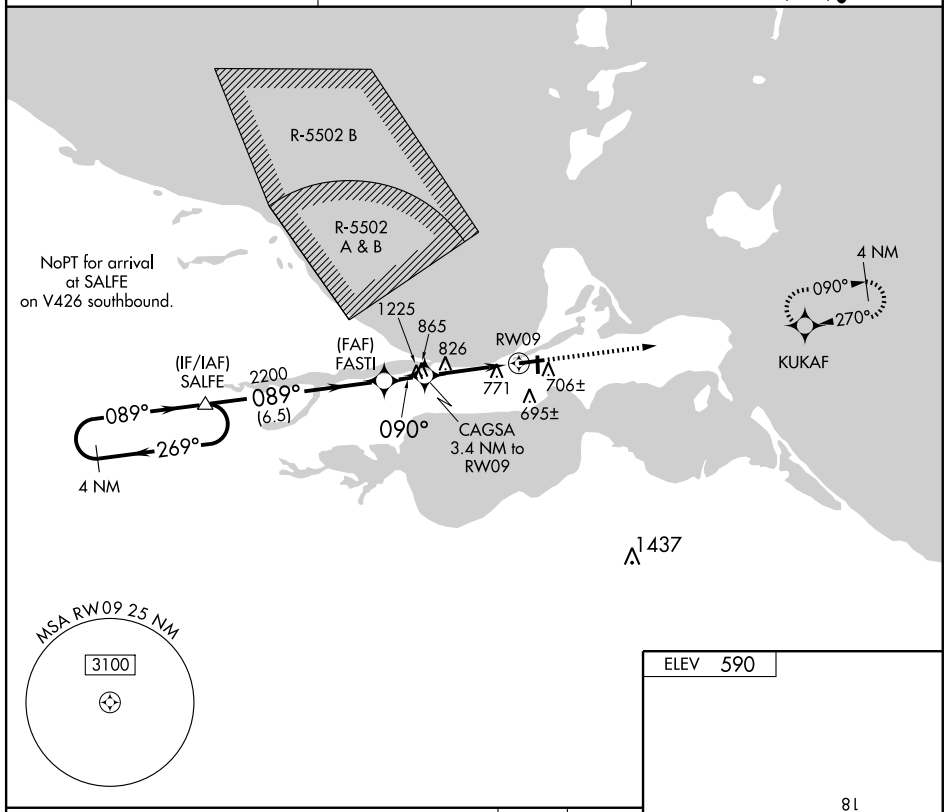
PORT CLINTON/CARL R. KELLER FIELD (PCW)

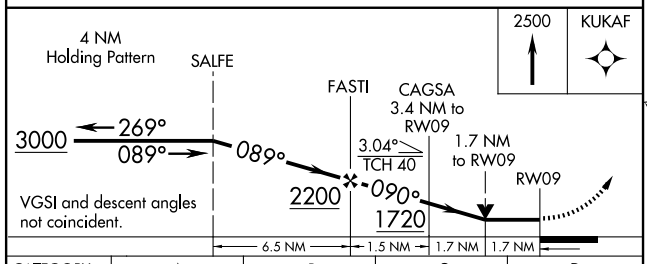
NA

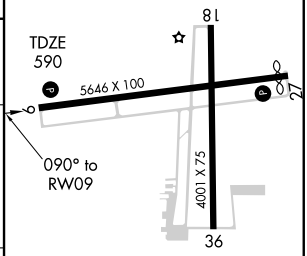
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Metcalf Field altimeter setting and increase all MDA 80 feet, increase LNAV visibility Cat C and D ¼ mile, and Circling visibility Cat C ¼ mile. VDP NA when using Metcalf Field altimeter setting.

MISSED APPROACH: Climb to 2500 direct KUKAF and hold.

AWOS-3	CLEVELAND APP CON	UNICOM
118.775	126.35 354.025	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	1140-1 550 (600-1)		1140-1½ 550 (600-1½)	1140-1¾ 550 (600-1¾)
CIRCLING	1140-1 550 (600-1)		1140-1½ 550 (600-1½)	1140-2 550 (600-2)

MIRL Rwys 9-27 and 18-36 L
REIL Rwys 9 and 27 L

EC-2, 14 JAN 2010 to 11 FEB 2010

WAAS CH 58012 W27A	APP CRS 270°	Rwy ldg 5445 TDZE 588 Apt Elev 590

RNAV (GPS) RWY 27

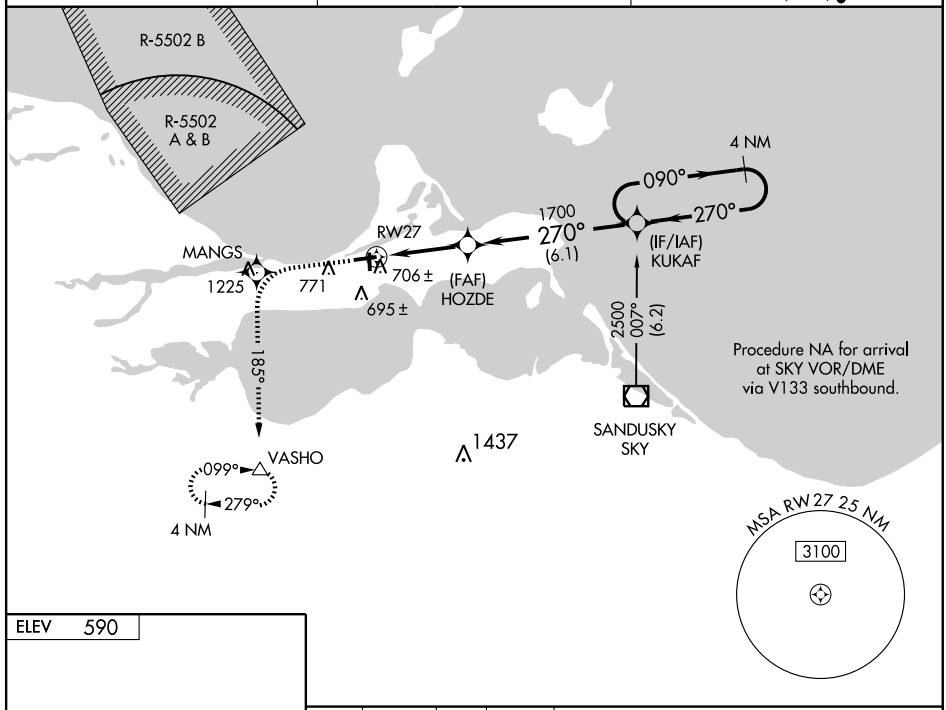
PORT CLINTON/CARL R. KELLER FIELD (PCW)

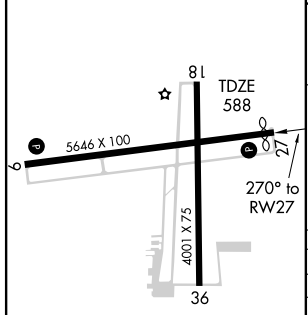
Baro-VNAV NA when using Metcalf Field altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Metcalf Field altimeter setting and increase all DA 69 feet, and all MDA 80 feet, increase LPV and LNAV/VNAV all Cats visibility ¼ mile, LNAV visibility Cat C and D ¼ mile, and Circling visibility Cat C ¼ mile.

NA

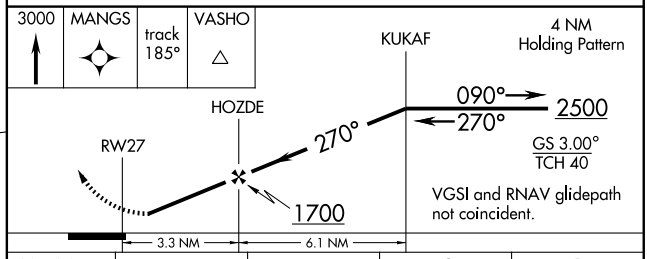
MISSED APPROACH: Climb to 3000 direct MANGS and via track 185° to VASHO and hold, continue climb-in-hold to 3000.

AWOS-3	CLEVELAND APP CON	UNICOM
118.775	126.35 354.025	122.8 (CTAF) L





MIRL Rwys 9-27 and 18-36 L
REIL Rwys 9 and 27 L



CATEGORY	A	B	C	D
LPV DA	910-1¼ 322 (400-1¼)			
LNAV/VNAV DA	956-1¼ 368 (400-1¼)			
LNAV MDA	980-1 392 (400-1)			980-1¼ 392 (400-1¼)
CIRCLING	1140-1 550 (600-1)		1140-1½ 550 (600-1½)	1140-2 550 (600-2)

VOR/DME SKY 109.2 Chan 29	APP CRS 301°	Rwy ldg N/A TDZE N/A Apt Elev 590

VOR/DME-A

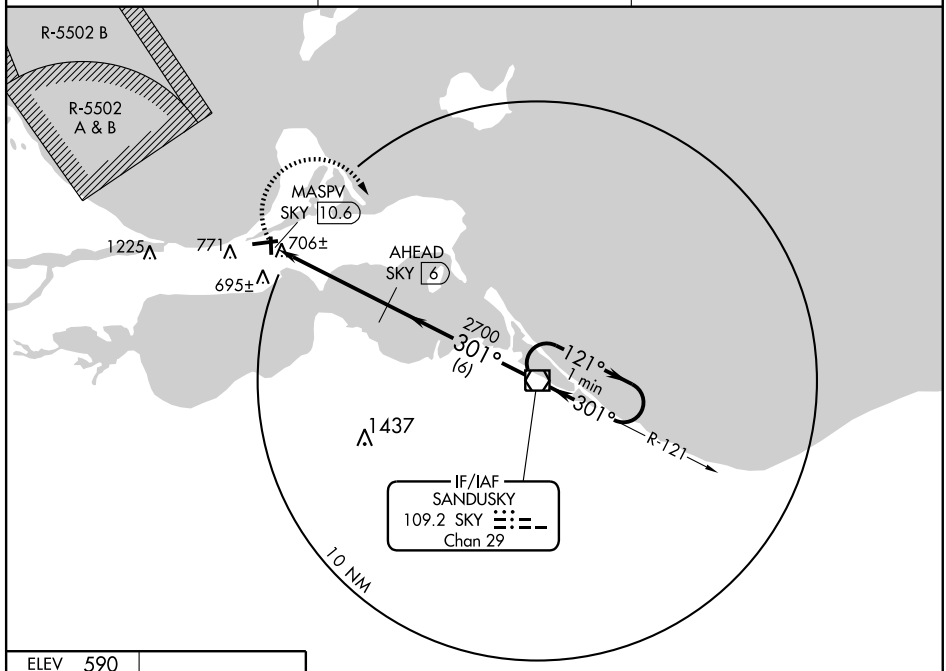
PORT CLINTON/CARL R. KELLER FIELD (PCW)

When local altimeter setting not received, use Metcalf Field altimeter setting and increase all MDA 80 feet, and visibility Cat C ¼ mile.

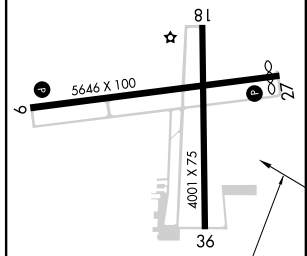
NA

MISSED APPROACH: Climbing right turn to 3000 direct SKY VOR/DME and hold.

AWOS-3	CLEVELAND APP CON	UNICOM
118.775	126.35 354.025	122.8 (CTAF) L



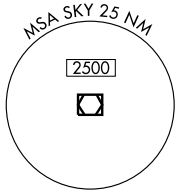
ELEV 590

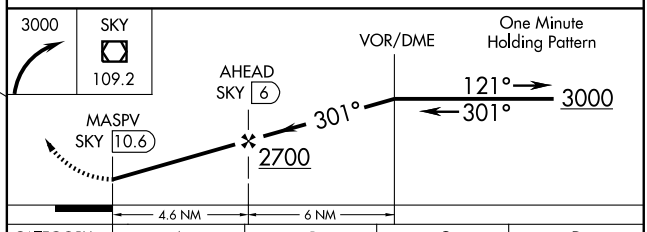


301° 4.6 NM from FAF

MIRL Rwys 9-27 and 18-36 L
REIL Rwys 9 and 27 L

NoPT for arrival at SKY VOR/DME on airway radials 105 CW 179.





CATEGORY	A	B	C	D
CIRCLING	1140-1 550 (600-1)		1140-1½ 550 (600-1½)	1140-2 550 (600-2)

WAAS CH 45907 W18A	APP CRS 183°	Rwy ldg 5001 TDZE 663 Apt Elev 663

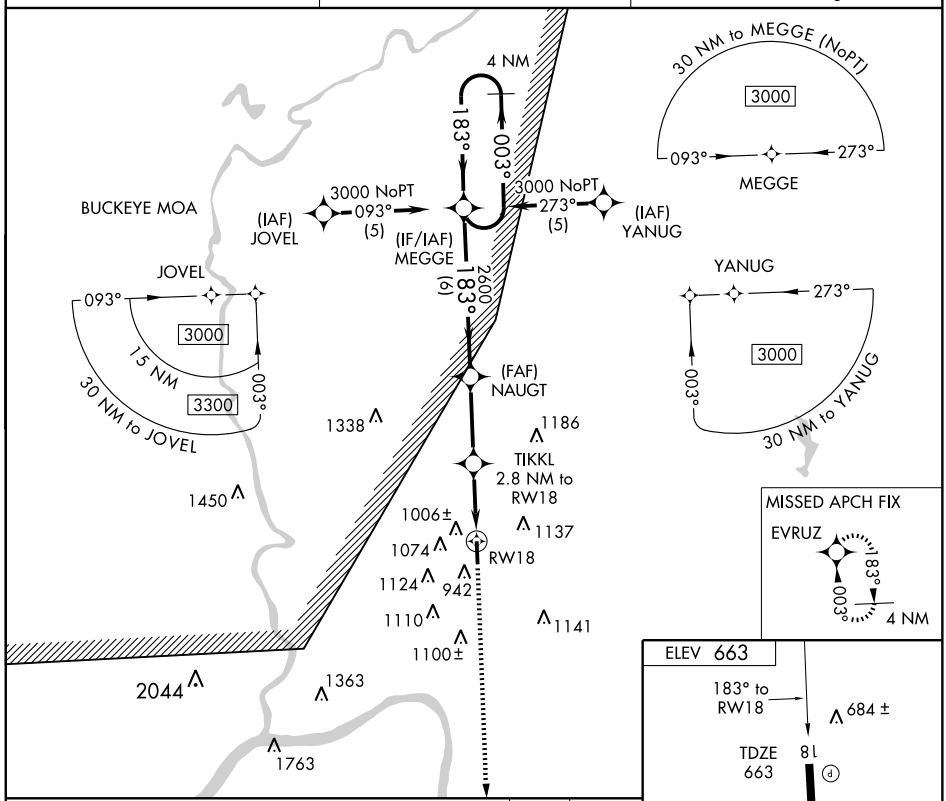
RNAV (GPS) RWY 18

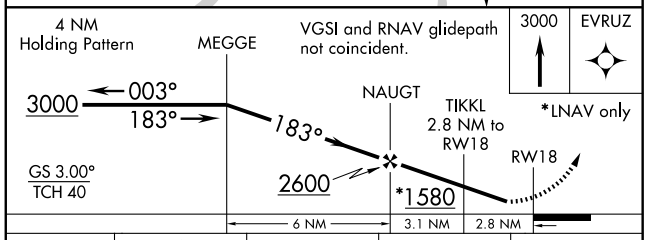
PORTSMOUTH/GREATER PORTSMOUTH RGNL (PMH)

DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
NA When local altimeter setting not received, use Huntington altimeter setting and increase all DA 96 feet and all MDA 100 feet and LPV visibility ¼ mile all Cats, LNAV Cat C, D visibility ½ mile and Circling Cat B, D visibility ¼ mile, Cat C visibility ½ mile.

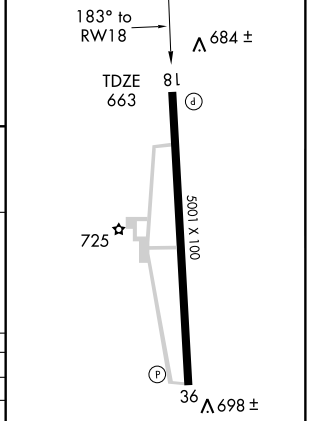
MISSED APPROACH: Climb to 3000 direct EVRUZ and hold.

AWOS-3	HUNTINGTON APP CON	UNICOM
125.175	128.4 270.1	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1010-1¼ 347 (400-1¼)			
LNAV MDA	1260-1 597 (600-1)		1260-1½ 597 (600-1½)	1260-1¾ 597 (600-1¾)
CIRCLING	1320-1 657 (700-1)	1380-1 717 (800-1)	1380-2 717 (800-2)	1440-2½ 777 (800-2½)



REIL Rwys 18 and 36 L
MIRL Rwy 18-36 L

WAAS CH 70408 W36A	APP CRS 003°	Rwy ldg 5001 TDZE 662 Apt Elev 663

RNAV (GPS) RWY 36

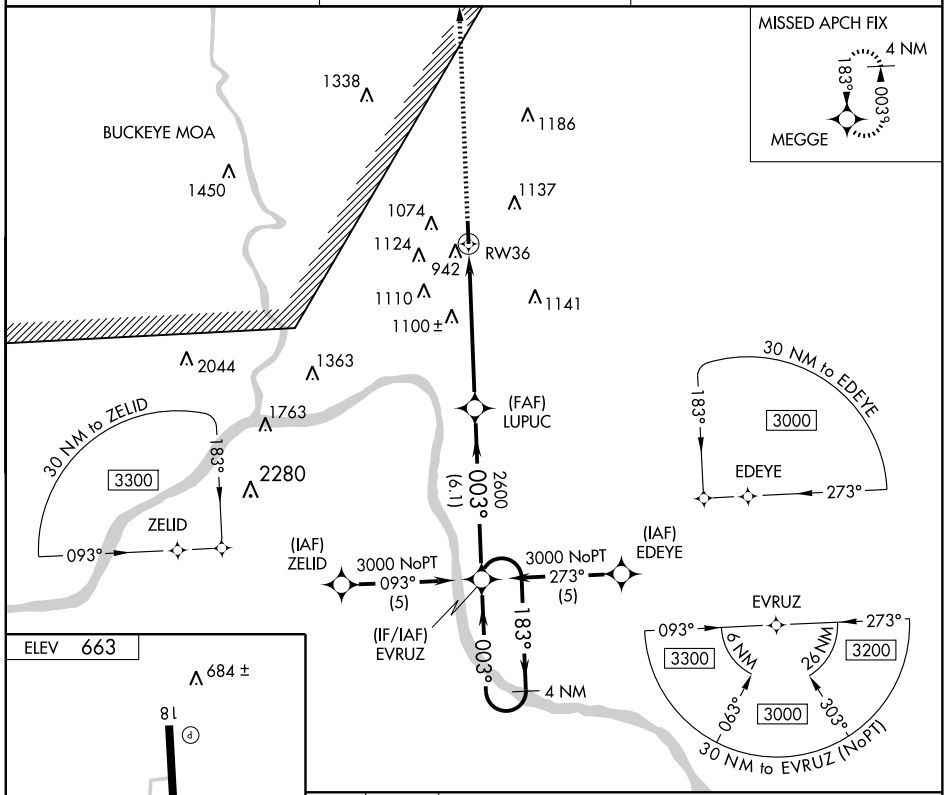
PORTSMOUTH/GREATER PORTSMOUTH RGNL (PMH)

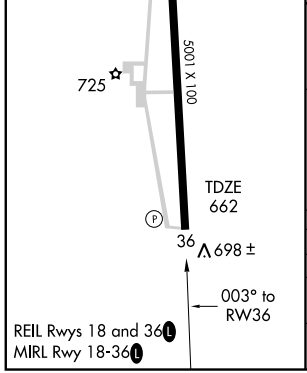
When local altimeter setting not received, use Huntington altimeter setting and increase all DA 96 feet and all MDA 100 feet and LPV visibility ¼ mile all Cats, LNAV Cat B visibility ¼ mile, Cat C, D visibility ½ mile, and Circling Cat B visibility ¼ mile, Cat C visibility ½ mile and Cat D visibility ¼ mile. Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA.

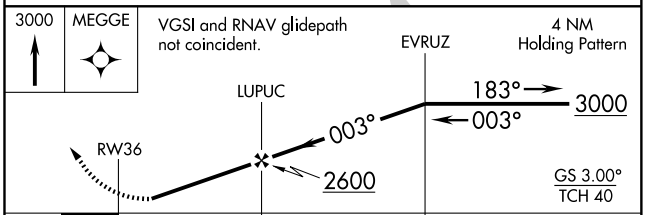
NA

MISSED APPROACH: Climb to 3000 direct MEGGE and hold.

AWOS-3	HUNTINGTON APP CON	UNICOM
125.175	128.4 270.1	122.8 (CTAF) L







CATEGORY	A	B	C	D
LPV DA	912-1 250 (300-1)			
LNAV MDA	1400-1 738 (800-1)		1400-2 738 (800-2)	1400-2¼ 738 (800-2¼)
CIRCLING	1400-1 737 (800-1)		1400-2 737 (800-2)	1440-2½ 777 (800-2½)

VORTAC YRK 112.8 Chan 75	APP CRS 033°	Rwy ldg N/A TDZE N/A Apt Elev 663

VOR/DME-A

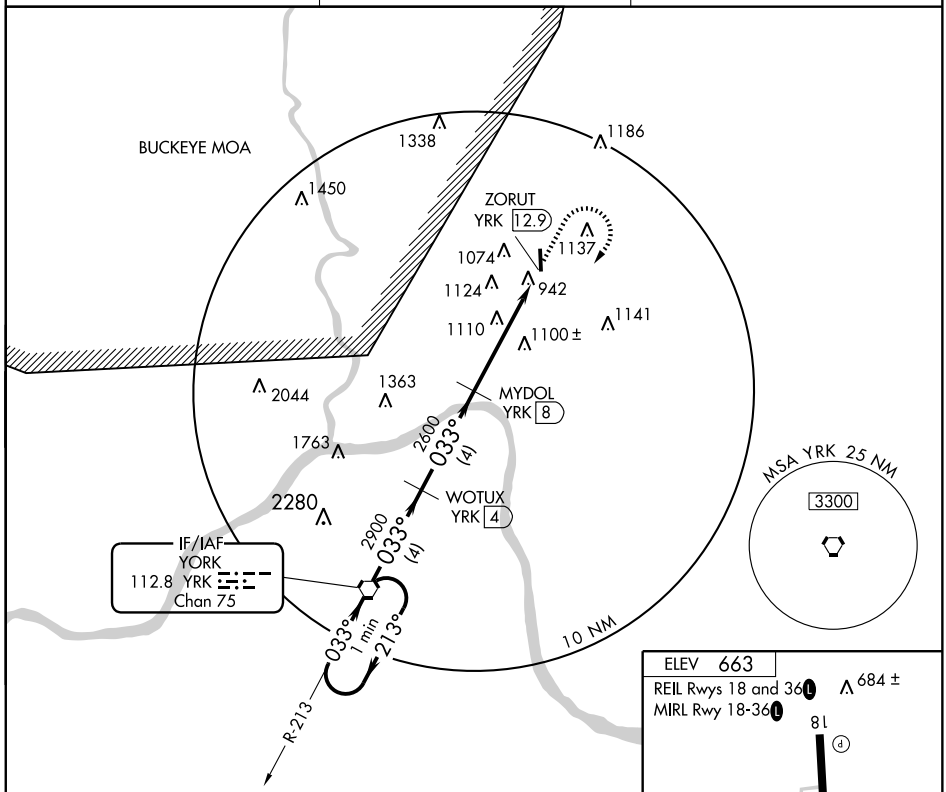
PORTSMOUTH/GREATER PORTSMOUTH RGNL (PMH)

When local altimeter setting not received, use Huntington altimeter setting and increase all MDA 100 feet and increase Cat B, D visibility ¼ mile, Cat C visibility ½ mile.

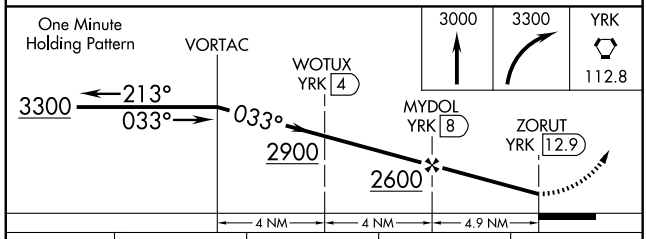
NA

MISSED APPROACH: Climb to 3000 then climbing right turn to 3300 direct YRK VORTAC and hold.

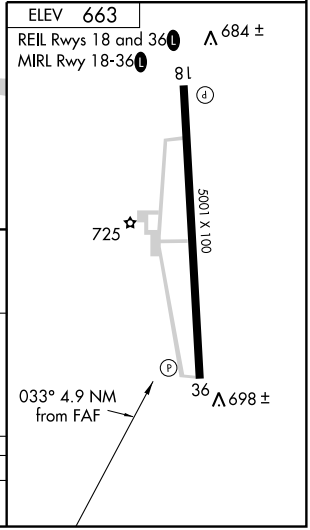
AWOS-3	HUNTINGTON APP CON	UNICOM
125.175	128.4 270.1	122.8 (CTAF) L



NoPT for arrivals on YRK VORTAC airway radials 246 CW 291.



CATEGORY	A	B	C	D
CIRCLING	1380-1 717 (800-1)		1380-2 717 (800-2)	1440-2½ 777 (800-2½)



RAVENNA, OHIO

AL-5844 (FAA)

VOR/DME ACO	APP CRS	Rwy ldg	3500
114.4	269°	TDZE	1197
Chan 91		Apt Elev	1197

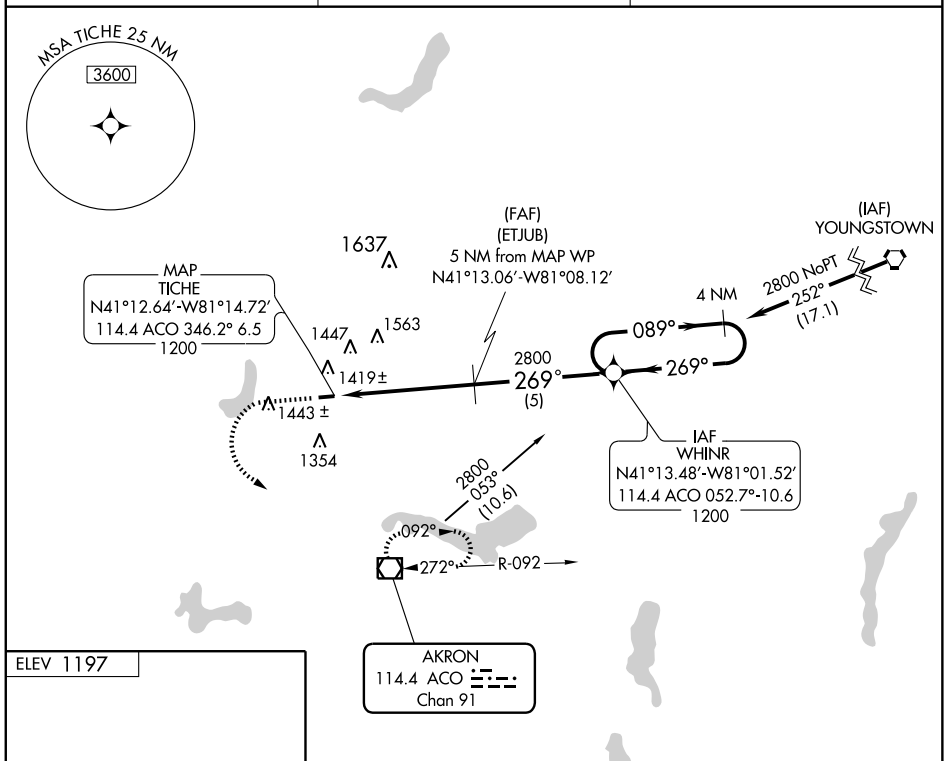
VOR/DME RNAV or GPS RWY 27

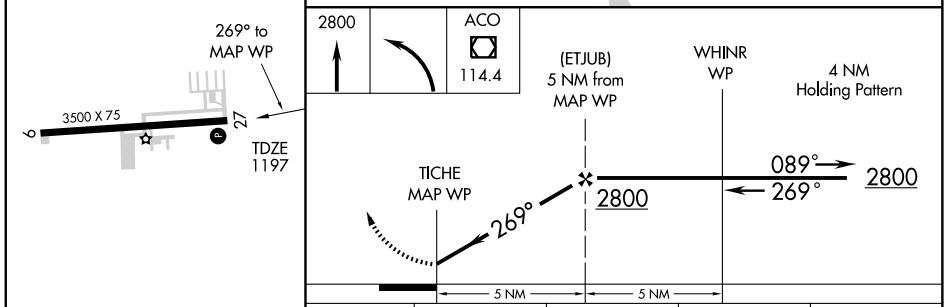
RAVENNA/ PORTAGE COUNTY (29G)

NA Use Akron-Canton altimeter setting.

MISSED APPROACH: Climb to 2800 then left turn direct ACO VOR/DME and hold.

AKRON-CANTON APP CON ★	CLNC DEL	UNICOM
118.6 371.875	125.65	123.05 (CTAF) L





CATEGORY	A	B	C	D
S-27	1760-1	563 (600-1)	1760-1½ 563 (600-1½)	NA
CIRCLING	1800-1	603 (700-1)	1800-1¾ 603 (700-1¾)	NA

REIL Rwys 9 and 27 L
MIRL Rwy 9-27 L

EC-2, 14 JAN 2010 to 11 FEB 2010

VOR/DME ACO 114.4 Chan 91	APP CRS 344°	Rwy ldg N/A TDZE N/A Apt Elev 1197

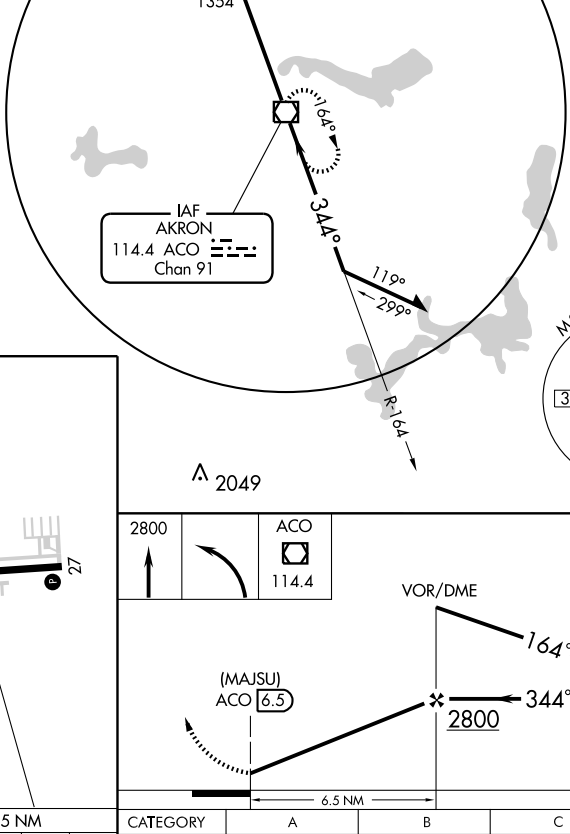
VOR or GPS-A

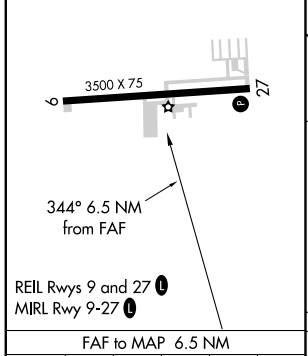
RAVENNA/ PORTAGE COUNTY (29G)

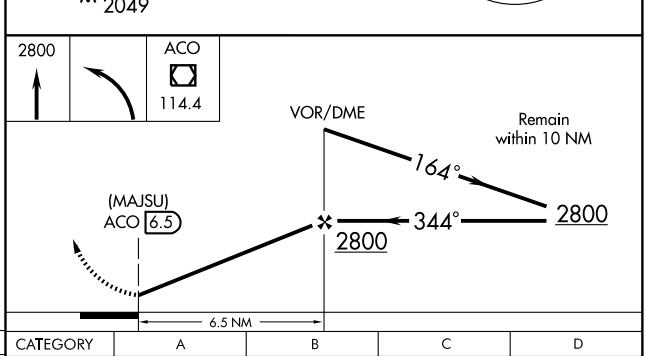
NA Use Akron-Canton altimeter setting.

MISSED APPROACH: Climb to 2800, then left turn direct ACO VOR/DME and hold.

AKRON-CANTON APP CON ★	CLNC DEL	UNICOM
118.6 371.875	125.65	123.05 (CTAF) L







FAF to MAP 6.5 NM					
Knots	60	90	120	150	180
Min:Sec	6:30	4:20	3:15	2:36	2:10

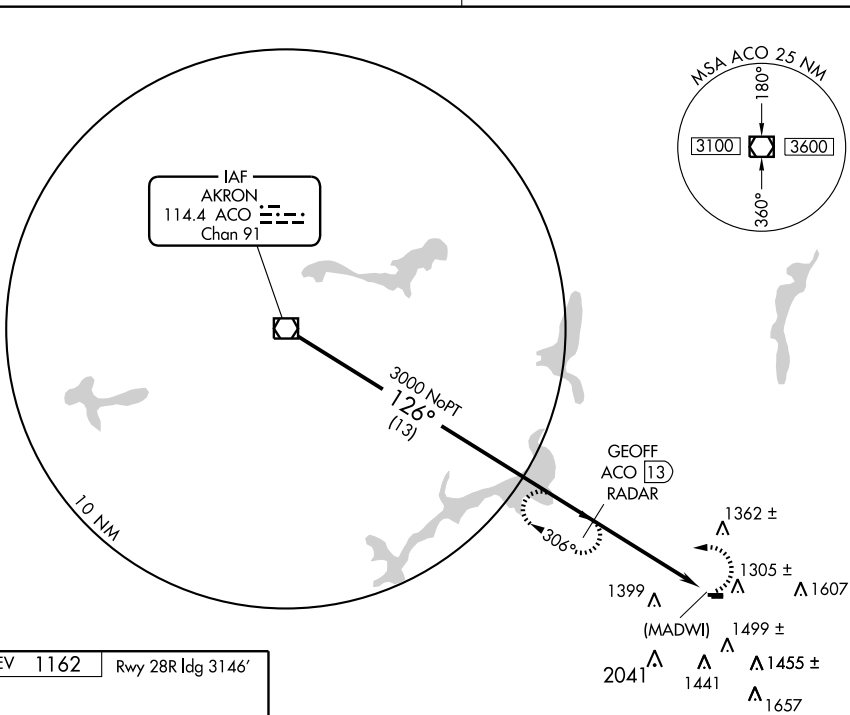
CATEGORY	A	B	C	D
CIRCLING	1800-1 603 (700-1)		1800-1¾ 603 (700-1¾)	NA

VOR/DME ACO 114.4 Chan 91	APP CRS 126°	Rwy ldg N/A TDZE N/A Apt Elev 1162

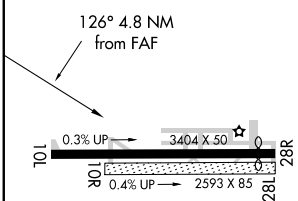
VOR or GPS-A

SALEM AIRPARK INC (38D)

NA Obtain local altimeter on CTAF, when not received, use Youngstown altimeter setting.	MISSED APPROACH: Climbing left turn to 3000 via ACO R-126 to GEOFF and hold.
AKRON-CANTON APP CON ★ 125.5 371.875	UNICOM 122.7 (CTAF) L



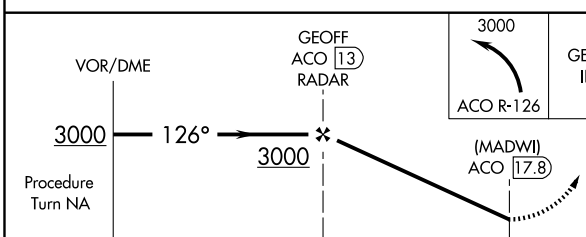
ELEV 1162 | Rwy 28R ldg 3146'



LIRL Rwy 10L-28R L

FAF to MAP 4.8 NM					
Knots	60	90	120	150	180
Min:Sec	4:48	3:12	2:24	1:55	1:36

DME or RADAR REQUIRED



CATEGORY	A	B	C	D
CIRCLING	1680-1	518 (600-1)	1720-1½ 558 (600-1½)	NA
YOUNGSTOWN ALTIMETER SETTING MINIMUMS				
CIRCLING	1740-1	578 (600-1)	1780-1¾ 618 (700-1¾)	NA

EC-2, 14 JAN 2010 to 11 FEB 2010

VOR/DME SKY 109.2 Chan 29	APP CRS 274°	Rwy ldg 3559 TDZE 577 Apt Elev 580

VOR/DME or GPS RWY 27

SANDUSKY/ GRIFFING SANDUSKY (SKY)

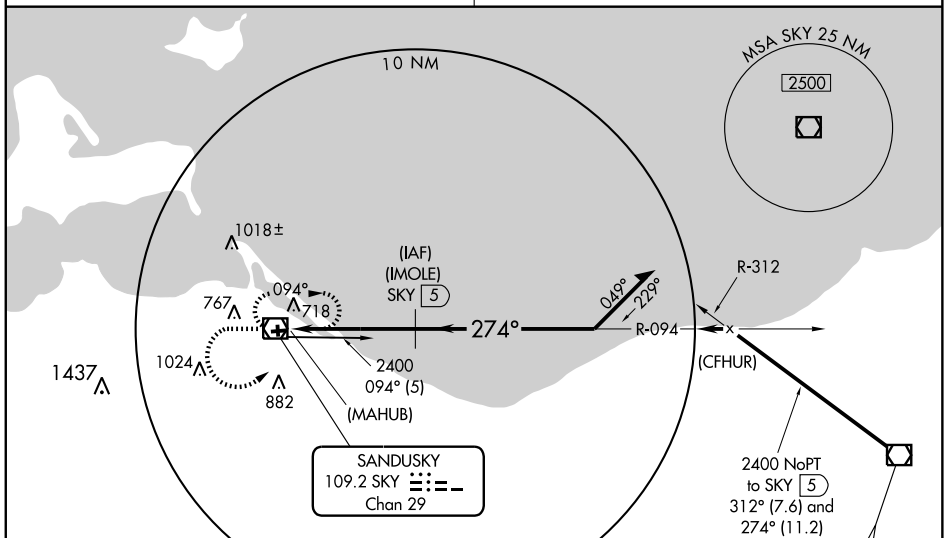
Obtain local altimeter setting on CTAF; when not received, use Cleveland Hopkins altimeter setting.

NA

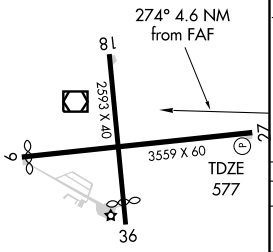
MISSED APPROACH: Climb to 3000, then left turn direct SKY VOR/DME and hold.

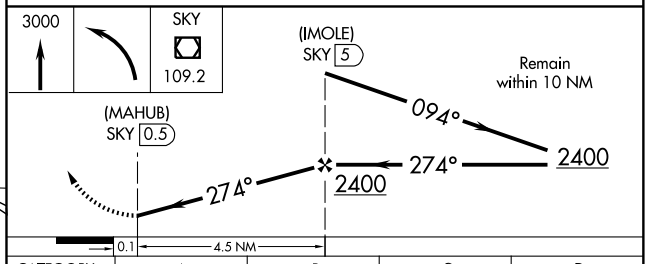
CLEVELAND APP CON
126.35 354.025

UNICOM
123.0 (CTAF)



ELEV 580





CATEGORY	A	B	C	D
S-27	1020-1 443 (500-1)		1020-1¼ 443 (500-1¼)	NA
CIRCLING	1020-1 440 (500-1)	1160-1 580 (600-1)	1160-1½ 580 (600-1½)	NA
CLEVELAND HOPKINS ALTIMETER SETTING MINIMUMS				
S-27	1140-1 563 (600-1)		1140-1½ 563 (600-1½)	NA
CIRCLING	1140-1 560 (600-1)	1260-1 680 (700-1)	1260-2 680 (700-2)	NA

REIL Rwy 9
LIRL Rwys 9-27 and 18-36

EC-2, 14 JAN 2010 to 11 FEB 2010

VOR/DME SKY 109.2 Chan 29	APP CRS 274°	Rwy ldg 3559 TDZE 577 Apt Elev 580

VOR RWY 27

SANDUSKY/ GRIFFING SANDUSKY (SKY)

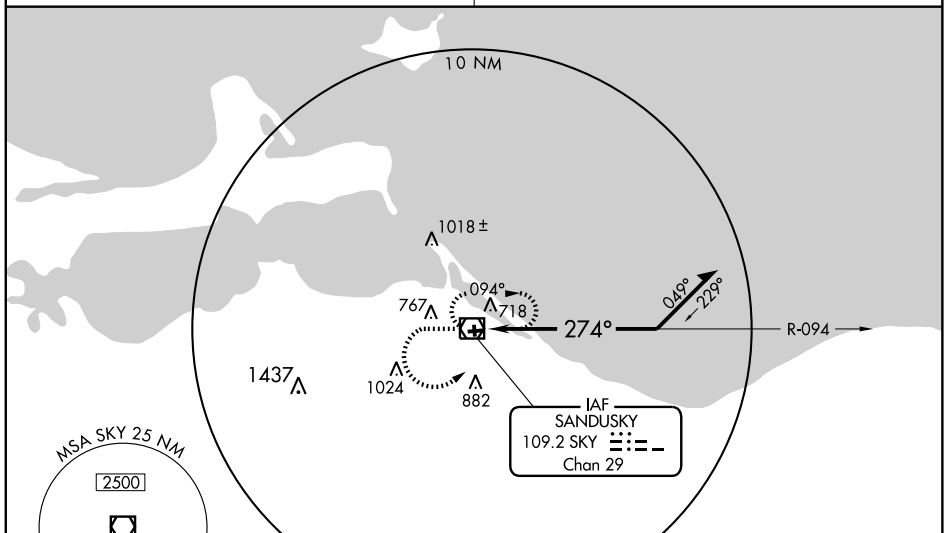
Obtain local altimeter setting on CTAF; when not received, use Cleveland Hopkins altimeter setting.

NA

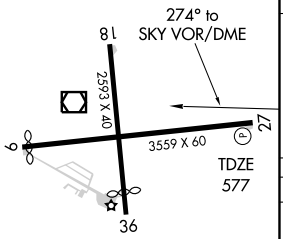
MISSED APPROACH: Climb to 3000, then left turn direct SKY VOR/DME and hold.

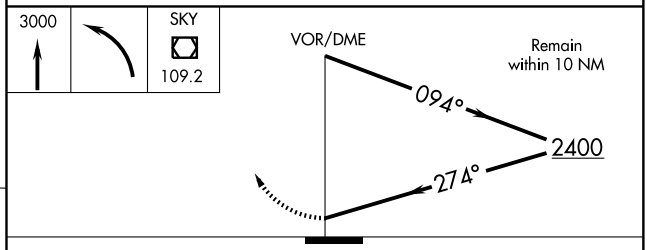
CLEVELAND APP CON
126.35 354.025

UNICOM
123.0 (CTAF)



ELEV 580





CATEGORY	A	B	C	D
S-27	1080-1 503 (500-1)		1080-1½ 503 (500-1½)	NA
CIRCLING	1080-1 500 (500-1)	1160-1 580 (600-1)	1160-1½ 580 (600-1½)	NA
CLEVELAND HOPKINS ALTIMETER SETTING MINIMUMS				
S-27	1200-1 623 (700-1)		1200-1¾ 623 (700-1¾)	NA
CIRCLING	1200-1 620 (700-1)	1260-1 680 (700-1)	1260-2 680 (700-2)	NA

REIL Rwy 9
LIRL Rwys 9-27 and 18-36

EC-2. 14 JAN 2010 to 11 FEB 2010

VOR/DME ACO	APP CRS	Rwy ldg	2768
114.4	146°	TDZE	1188
Chan 91		Apt Elev	1188

VOR or GPS RWY 17

SEBRING/ TRI-CITY (3G6)

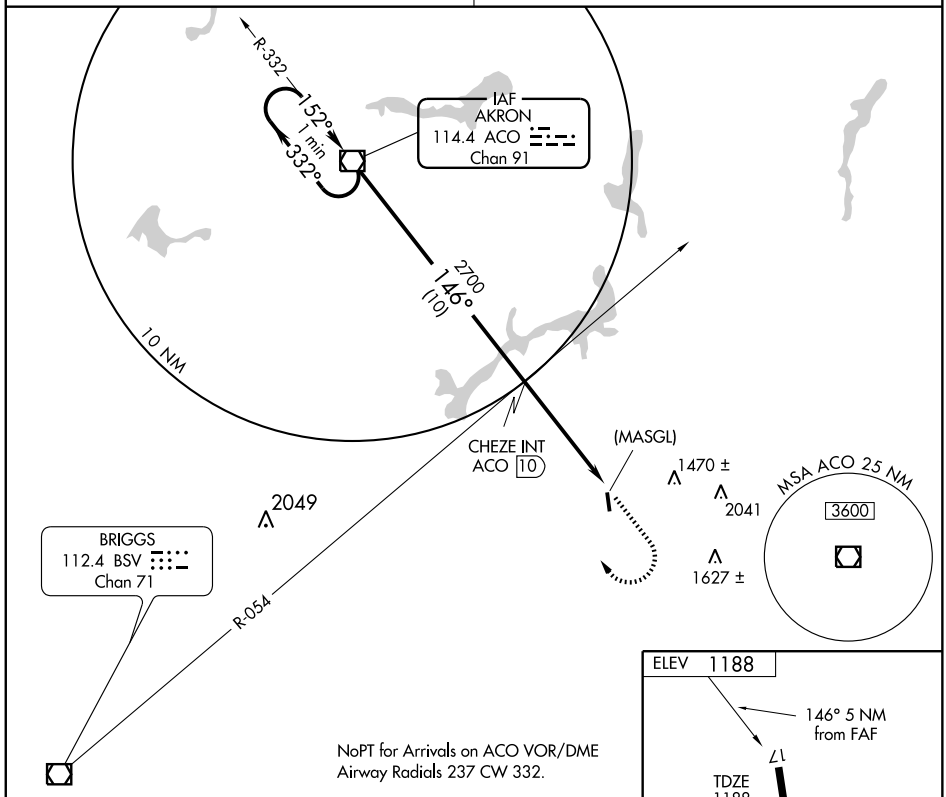
NA

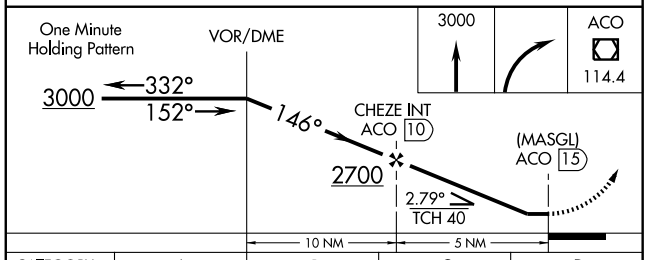
Use Akron-Canton altimeter setting.

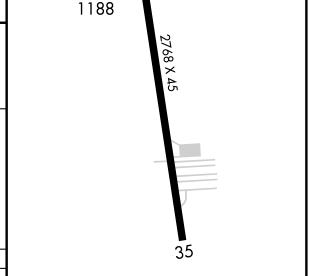
MISSED APPROACH: Climb to 3000 then right turn direct ACO VOR/DME and hold.

AKRON-CANTON APP CON ★
125.5 371.875

CTAF 122.9 L







MIRL Rwy 17-35 L ★

CATEGORY	A	B	C	D
S-17	1640-1 452 (500-1)		1640-1¼ 452 (500-1¼)	NA
CIRCLING	1680-1 492 (500-1)	1700-1 512 (600-1)	1700-1½ 512 (600-1½)	NA

FAF to MAP 5 NM

Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

EC-2. 14 JAN 2010 to 11 FEB 2010

VORTAC MFD 108.8 Chan 25	APP CRS 276°	Rwy ldg N/A TDZE N/A Apt Elev 1120

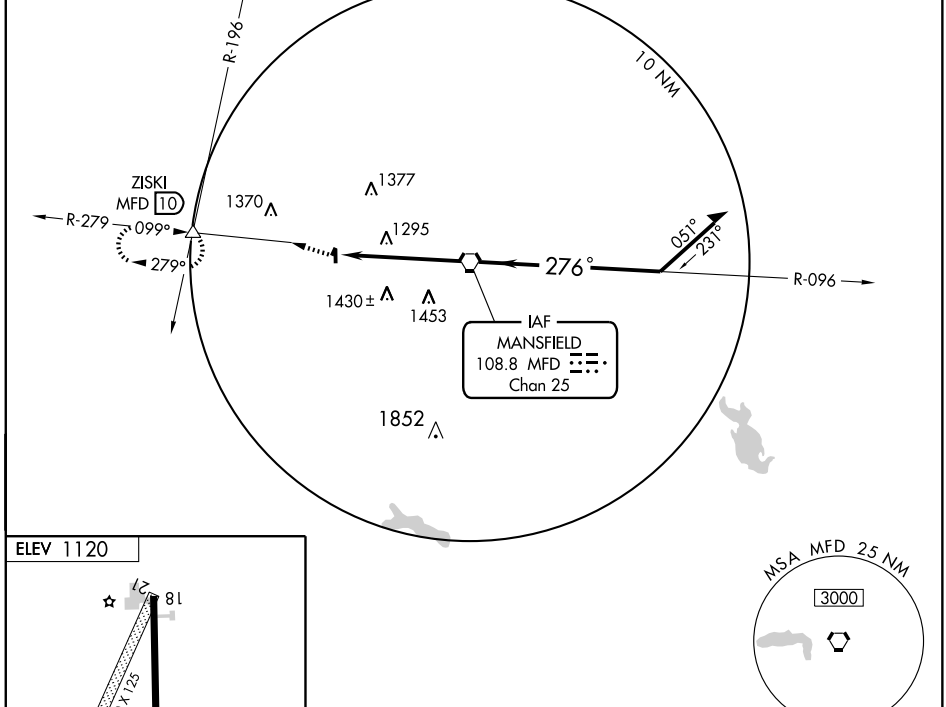
VOR-A
SHELBY COMMUNITY (12G)

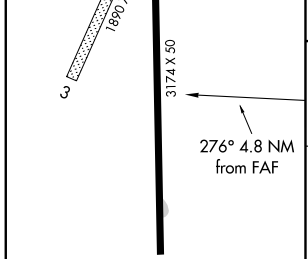
NA

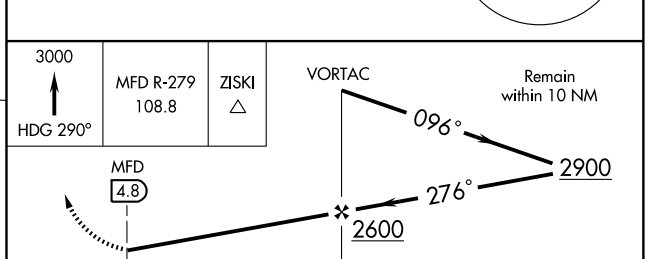
Use Mansfield altimeter setting.

MISSED APPROACH: Climb to 3000 via heading 290° and MFD R-279 to ZISKI Int/MFD 10 DME and hold.

MANSFIELD APP CON ★	UNICOM
124.2 390.8	122.8 (CTAF)







FAF to MAP 4.8 NM					
Knots	60	90	120	150	180
Min:Sec	4:48	3:12	2:24	1:55	1:36

CATEGORY	A	B	C	D
CIRCLING	1640-1 520 (600-1)		1640-1½ 520 (600-1½)	NA

EC-2. 14 JAN 2010 to 11 FEB 2010

SIDNEY, OHIO

AL-5047 (FAA)

VORTAC ROD 117.5 Chan 122	APP CRS 279°	Rwy ldg 4785 TDZE 1045 Apt Elev 1045

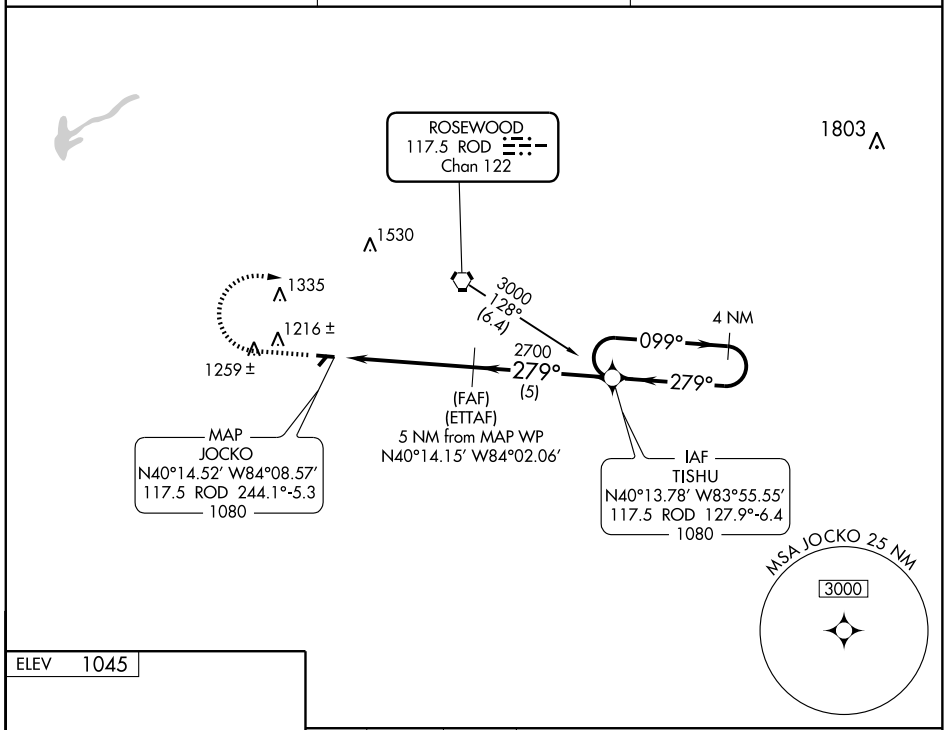
VOR/DME RNAV or GPS RWY 28

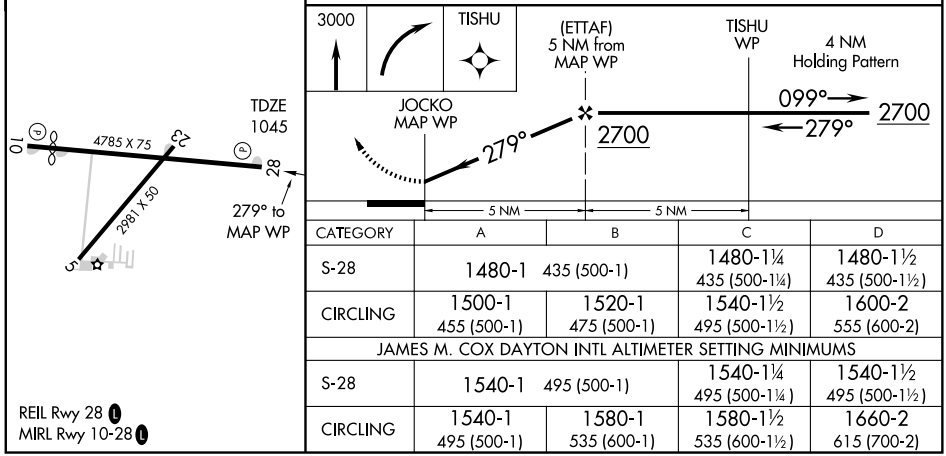
SIDNEY MUNI (I12)

Obtain local altimeter setting on CTAF; when not received, use James M. Cox Dayton Intl altimeter setting.

MISSED APPROACH: Climb to 3000 then right turn direct TISHU WP and hold.

AWOS-3	DAYTON APP CON	UNICOM
120.425	118.425 294.5	123.05 (CTAF) L





CATEGORY	A	B	C	D
S-28	1480-1 435 (500-1)		1480-1¼ 435 (500-1¼)	1480-1½ 435 (500-1½)
CIRCLING	1500-1 455 (500-1)	1520-1 475 (500-1)	1540-1½ 495 (500-1½)	1600-2 555 (600-2)
JAMES M. COX DAYTON INTL ALTIMETER SETTING MINIMUMS				
S-28	1540-1 495 (500-1)		1540-1¼ 495 (500-1¼)	1540-1½ 495 (500-1½)
CIRCLING	1540-1 495 (500-1)	1580-1 535 (600-1)	1580-1½ 535 (600-1½)	1660-2 615 (700-2)

REIL Rwy 28 L
MIRL Rwy 10-28 L

EC-2, 14 JAN 2010 to 11 FEB 2010

SIDNEY, OHIO

AL-5047 (FAA)

VORTAC ROD 117.5 Chan 122	APP CRS 246°	Rwy ldg 2981 TDZE 1041 Apt Elev 1045

VOR or GPS RWY 23

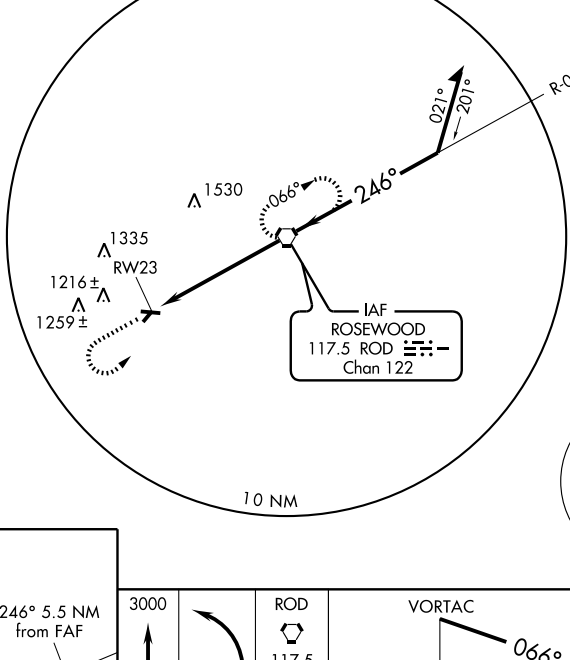
SIDNEY MUNI (I12)

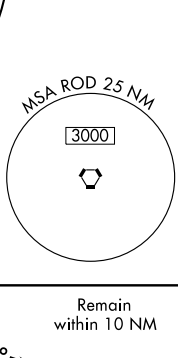
Obtain local altimeter setting on CTAF; when not received, use James M. Cox Dayton Intl altimeter setting.

NA

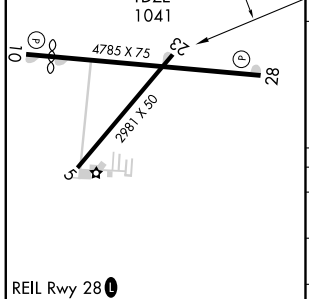
MISSED APPROACH: Climb to 3000 then left turn direct ROD VORTAC and hold.

AWOS-3	DAYTON APP CON	UNICOM
120.425	118.425 294.5	123.05 (CTAF) L





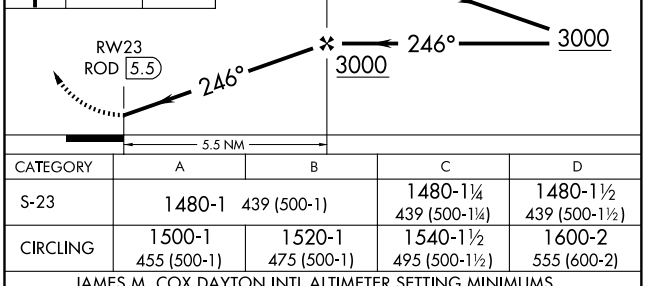
ELEV 1045



REIL Rwy 28 L

MIRL Rwy 10-28 L

FAF to MAP 5.5 NM					
Knots	60	90	120	150	180
Min:Sec	5:30	3:40	2:45	2:12	1:50



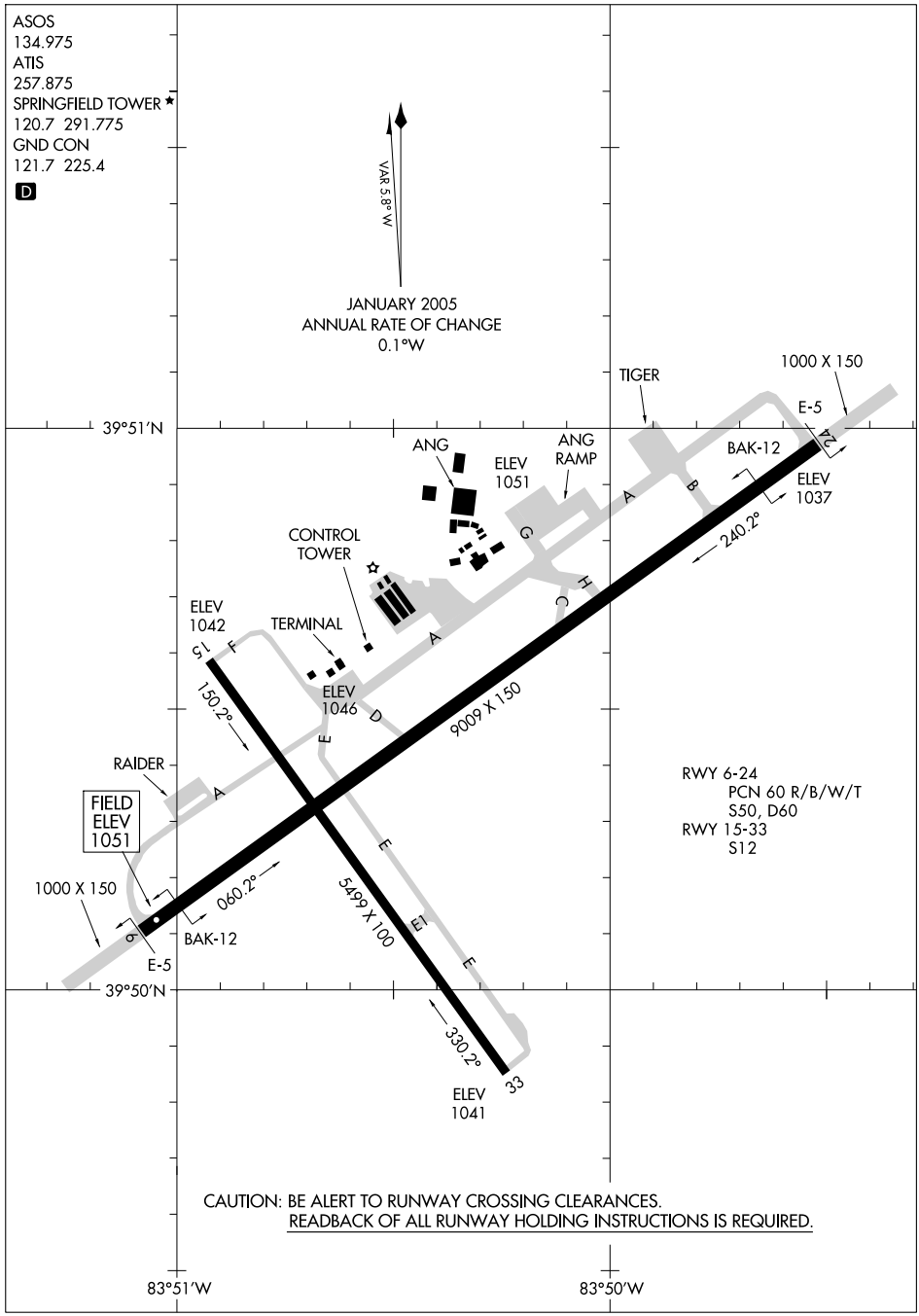
CATEGORY	A	B	C	D
S-23	1480-1 439 (500-1)		1480-1¼ 439 (500-1¼)	1480-1½ 439 (500-1½)
CIRCLING	1500-1 455 (500-1)	1520-1 475 (500-1)	1540-1½ 495 (500-1½)	1600-2 555 (600-2)
JAMES M. COX DAYTON INTL ALTIMETER SETTING MINIMUMS				
S-23	1520-1 479 (500-1)		1520-1¼ 479 (500-1¼)	1520-1½ 479 (500-1½)
CIRCLING	1540-1 495 (500-1)	1580-1 535 (600-1)	1580-1½ 535 (600-1½)	1660-2 615 (700-2)

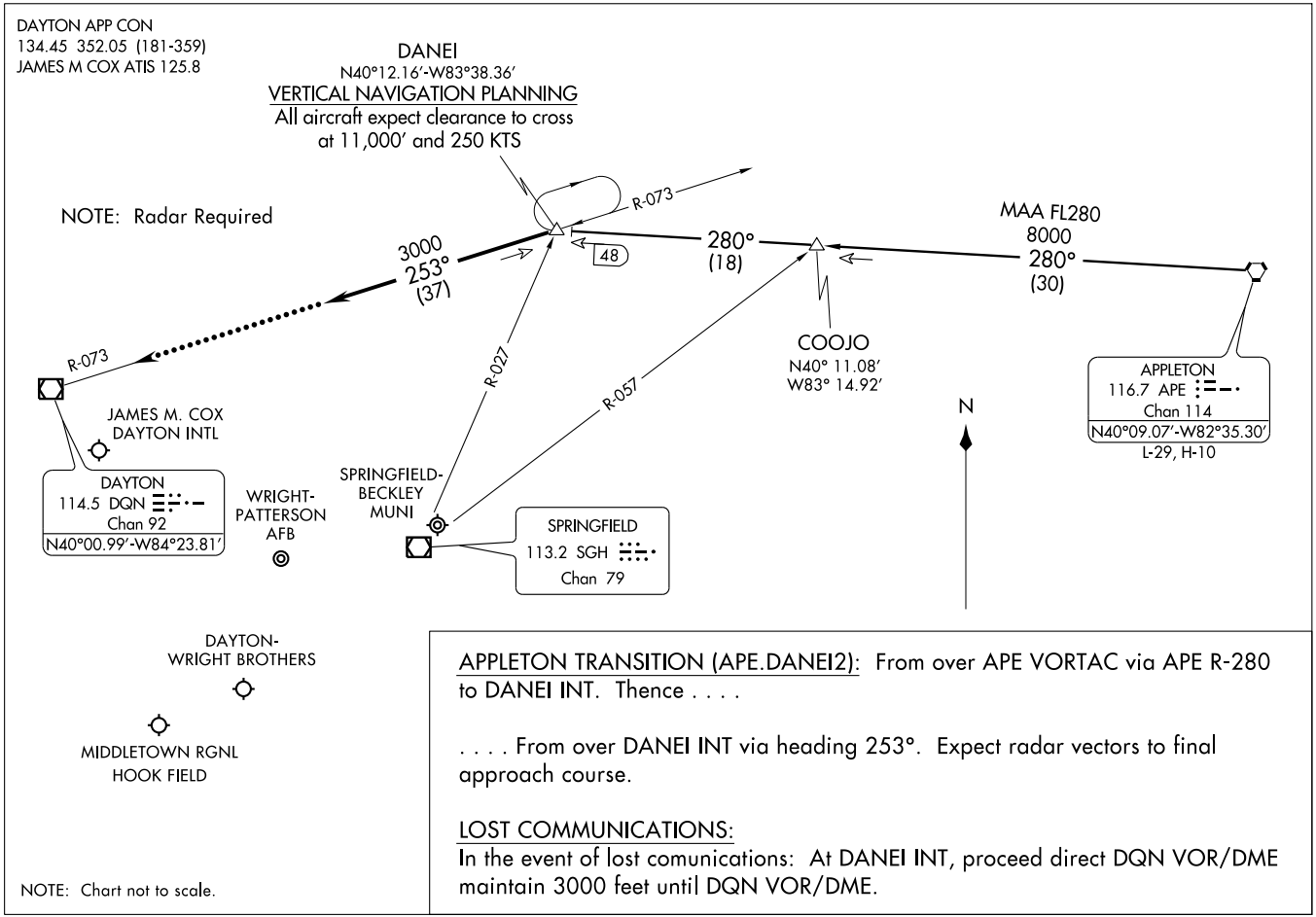
EC-2, 14 JAN 2010 to 11 FEB 2010

AIRPORT DIAGRAM

AL-958 (FAA)

SPRINGFIELD-BECKLEY MUNI (SGH)
SPRINGFIELD, OHIO




DAYTON APP CON
134.45 352.05 (181-359)
JAMES M COX ATIS 125.8
DANEI
N40°12.16′-W83°38.36′
VERTICAL NAVIGATION PLANNING
All aircraft expect clearance to cross
at 11,000′ and 250 KTS
NOTE: Radar Required
R-073
3000
253°
(37)
48
280°
(18)
MAA FL280
8000
280°
(30)
R-073
R-027
R-057
COOJO
N40° 11.08′
W83° 14.92′
N
APPLETON
116.7 APE
Chan 114
N40°09.07′-W82°35.30′
L-29, H-10
JAMES M. COX
DAYTON INTL
DAYTON
114.5 DQN
Chan 92
N40°00.99′-W84°23.81′
WRIGHT-
PATTERSON
AFB
SPRINGFIELD-
BECKLEY
MUNI
SPRINGFIELD
113.2 SGH
Chan 79
DAYTON-
WRIGHT BROTHERS
MIDDLETOWN RGNL
HOOK FIELD
APPLETON TRANSITION (APE.DANEI2): From over APE VORTAC via APE R-280 to DANEI INT. Thence . . . .
. . . . From over DANEI INT via heading 253°. Expect radar vectors to final approach course.
LOST COMMUNICATIONS:
In the event of lost comunications: At DANEI INT, proceed direct DQN VOR/DME maintain 3000 feet until DQN VOR/DME.
NOTE: Chart not to scale.
(DANEI.DANEI2) 09295
DANEI TWO ARRIVAL
ST-107 (FAA)
DAYTON, OHIO

HI-ILS or LOC/DME RWY 24

LOC I-SGH 111.3	APCH CRS 238°	Rwy ldg 9009 TDZE 1048 Arpt Elev 1051

JAL-958 [USAF]

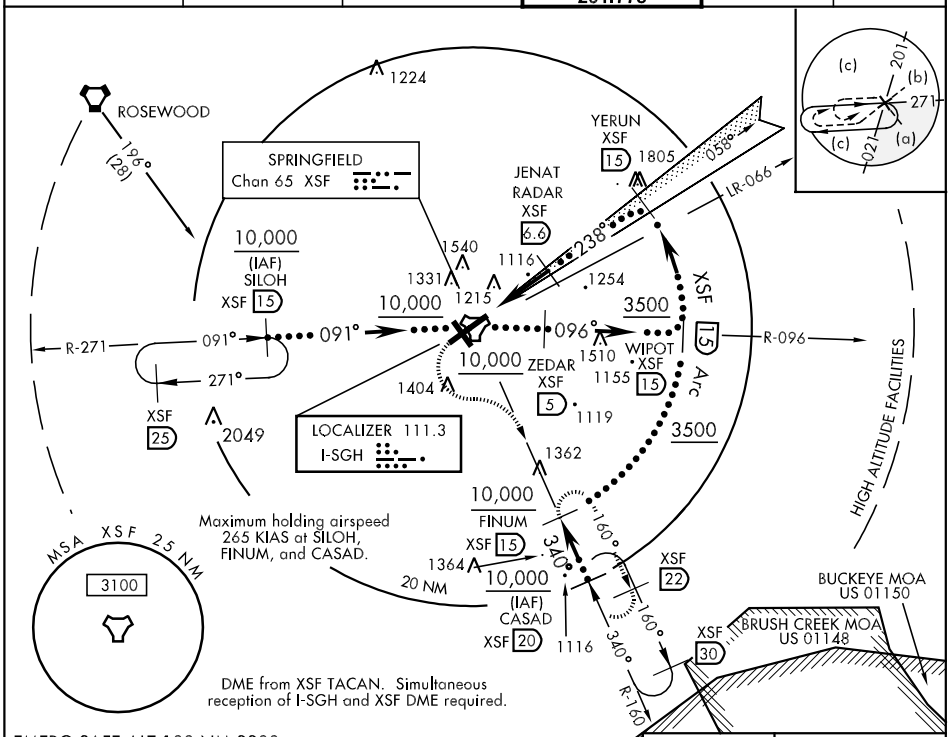
SPRINGFIELD-BECKLEY MUNI (KSGH)

** When ALS/SSALR inop, increase CAT CDE vis to ¾ mile.
*** When ALS/SSALR inop, increase CAT C vis to 1mile, CAT DE vis to 1¼ miles.

ALSF-2

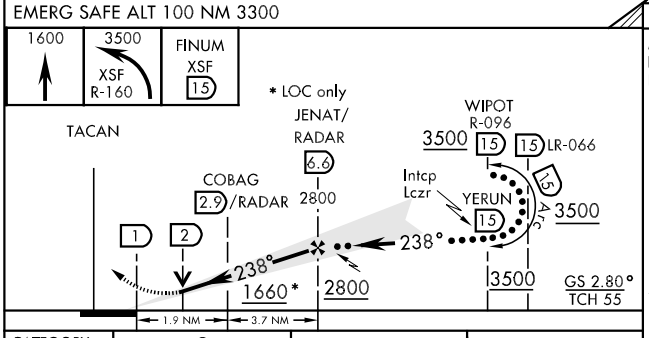
MISSED APPROACH: Climb to 1600 then climbing left turn to 3500 via XSF TACAN R-160 to FINUM (XSF 15 DME) and hold.

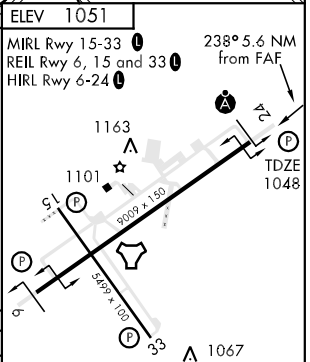
ATIS	ASOS	DAYTON APP CON	SPRINGFIELD TOWER *	GND CON	UNICOM
257.875	134.975	118.85 269.275	120.7 (CTAF) L 291.775	121.7 225.4	122.95



EMERG SAFE ALT 100 NM 3300

ELEV 1051





CATEGORY	C	D	E
S-ILS 24 **	1248-½	200	(200-½)
S-LOC 24***	1420-¾	372	(400-¾)
CIRCLING	1520-1½ 469 (500-1½)	1620-2 569 (600-2)	1900-3 849 (900-3)

FAF to MAP 5.6 NM					
Knots	120	140	160	180	200
Min:Sec	2:48	2:24	2:06	1:52	1:41

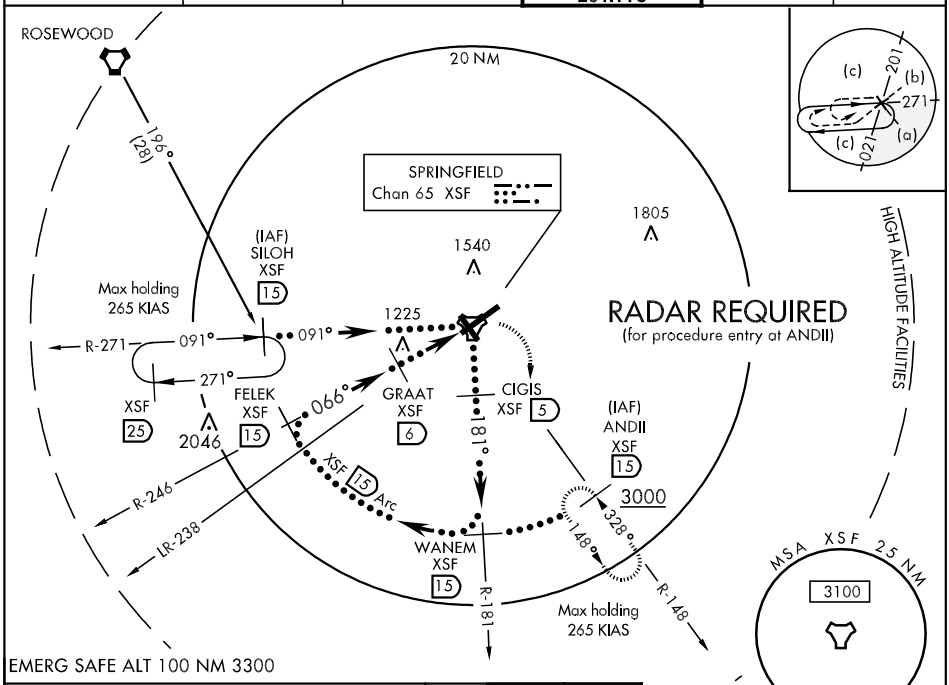
HI-TACAN RWY 6

TACAN XSF Chan 65	APCH CRS 066°	Rwy ldg 9009 TDZE 1051 Arpt Elev 1051	JAL-958 [USAF]	SPRINGFIELD-BECKLEY MUNI (KSGH)

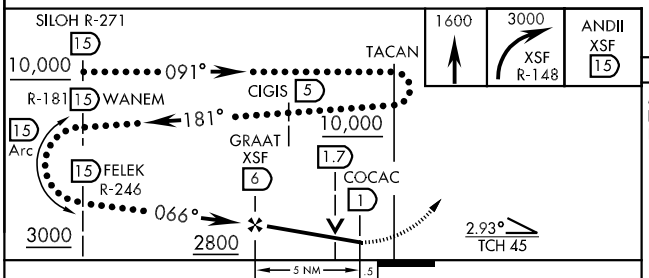
* When local altimeter setting not received, use Wright-Patterson AFB altimeter setting.
VDP NA when using Wright-Patterson AFB altimeter setting.

MISSED APPROACH: Climb to 1600, then climbing right turn to 3000 via XSF TACAN R-148 to ANDII/ XSF 15 DME and hold.

ATIS	ASOS	DAYTON APP CON	SPRINGFIELD TOWER *	GND CON	UNICOM
257.875	134.975	118.85 269.275	120.7 (CTAF) L 291.775	121.7 225.4	122.95

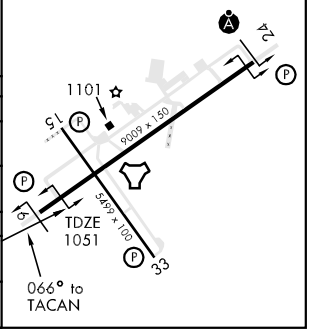


EMERG SAFE ALT 100 NM 3300



ELEV 1051

MIRL Rwy 15-33 L
REIL Rwy 6, 15 and 33 L
HIRL Rwy 6-24 L



CATEGORY	C	D	E
S-6	1480-1¼ 429 (500-1¼)	1480-1½ 429 (500-1½)	
CIRCLING	1520-1½ 469 (500-1½)	1620-2 569 (600-2)	1900-3 849 (900-3)
* WRIGHT-PATTERSON AFB ALTIMETER SETTING MINIMUMS			
S-6	1540-1¼ 489 (500-1¼)	1540-1½ 489 (500-1½)	1540-1¾ 489 (500-1¾)
CIRCLING	1580-1½ 529 (600-1½)	1680-2 629 (700-2)	1960-3 909 (1000-3)

HI-TACAN RWY 24

TACAN XSF Chan 65	APCH CRS 235°	Rwy ldg 9009 TDZE 1048 Arpt Elev 1051	JAL-958 [USAF]	SPRINGFIELD-BECKLEY MUNI (KSGH)

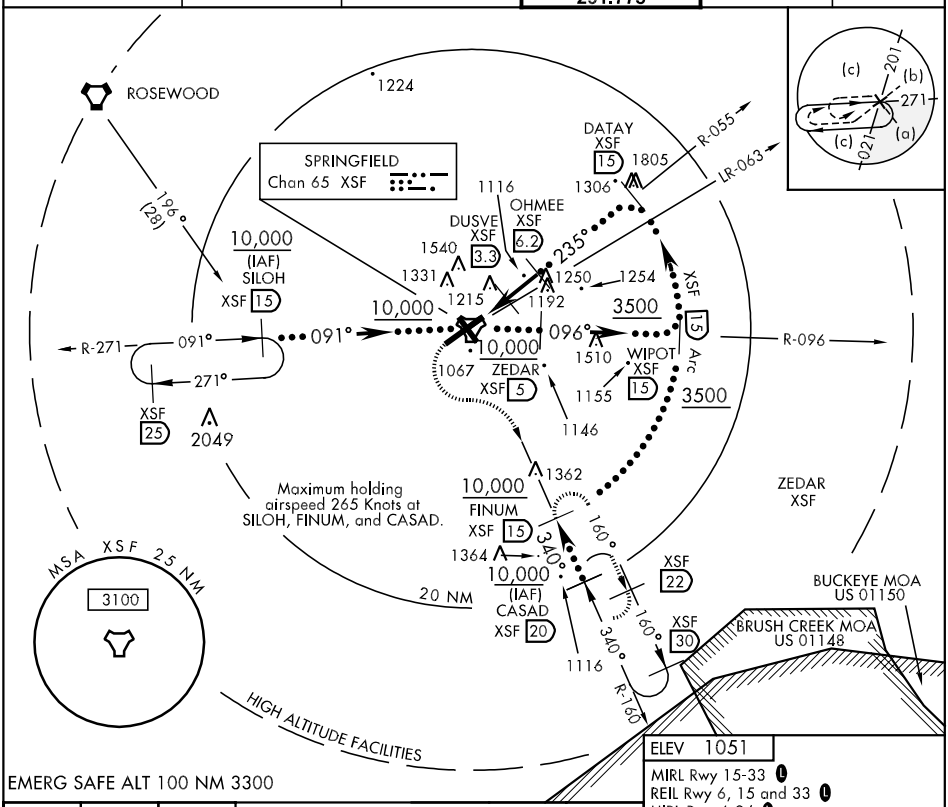
▼ NA

* When ALS/SSALR inop, increase CAT C vis to 1¼ miles, CAT D/E vis to 1½ miles.

ALSF-2

MISSED APPROACH: Climb to 1600, then climbing left turn to 3500 via XSF TACAN R-160 to FINUM (XSF 15 DME) and hold.

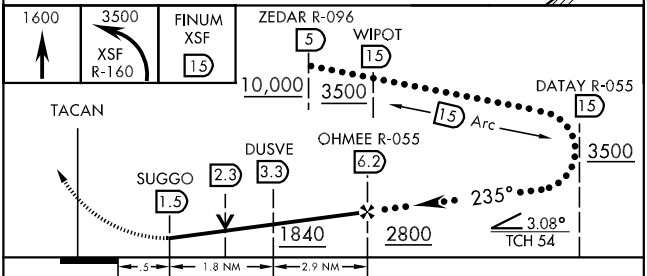
ATIS	ASOS	DAYTON APP CON	SPRINGFIELD TOWER *	GND CON	UNICOM
257.875	134.975	118.85 269.275	120.7 (CTAF) L 291.775	121.7 225.4	122.95

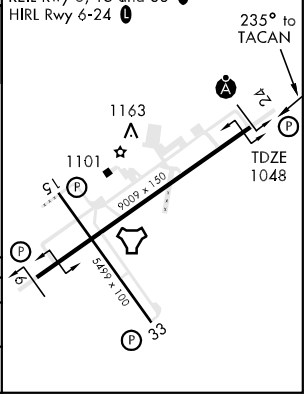


EMERG SAFE ALT 100 NM 3300

ELEV 1051

MIRL Rwy 15-33 L
REIL Rwy 6, 15 and 33 L
HIRL Rwy 6-24 L





CATEGORY	C	D	E
S-24 *	1500-¾ 452 (500-¾)	1500-1	452 (500-1)
CIRCLING	1520-1½ 469 (500-1½)	1620-2 569 (600-2)	1900-3 849 (900-3)

LOC I-SGH	APP CRS	Rwy ldg	9009
111.3	238°	TDZE	1048
		Apt Elev	1051

ILS or LOC RWY 24

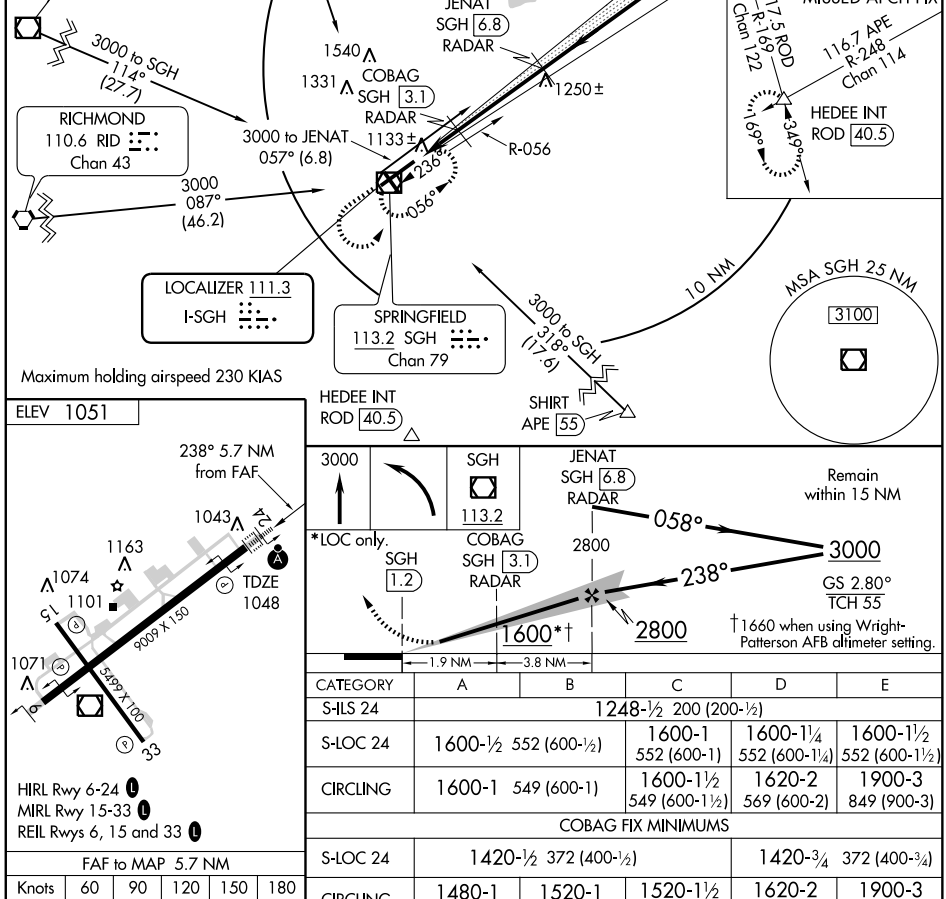
SPRINGFIELD-BECKLEY MUNI (SGH)

DME from SGH VOR/DME. Simultaneous reception of I-SGH and SGH DME required. ALSF-2 reverts to SSALR when tower is closed. When local altimeter setting not received, use Wright-Patterson AFB altimeter setting and increase all DA 55 feet and all MDA 60 feet and S-LOC 24 Cats C, D, and E and Circling Cat C visibility ¼ mile. For inoperative ALSF-2/SSALR, when using Wright-Patterson AFB altimeter setting, increase S-ILS 24 all Cats visibility to 1 mile and S-LOC 24 Cat E visibility to 2¼ mile. For inoperative ALSF-2/SSALR, increase S-ILS 24 Cat E visibility to ¾ mile and S-LOC 24 Cat E visibility to 2 miles. COBAG fix minimums: When local altimeter setting not received, use Wright-Patterson AFB altimeter setting and increase S-LOC 24 Cat C, D, and E visibility ¼ mile. For inoperative ALSF-2/SSALR when using Wright-Patterson AFB altimeter setting increase S-LOC 24 Cat E visibility to 1½ mile. For inoperative ALSF-2/SSALR, increase S-LOC 24 Cat E visibility to 1¼ mile.

ALSF-2

MISSED APPROACH: Climb to 3000 then left turn direct SGH VOR/DME and hold. (TACAN aircraft climb to 1600 then climbing left turn to 4000 via ROD VORTAC R-169 to HEDEE INT/ROD 40.5 DME and hold south, left turn, 349° inbound).

ASOS	ATIS	DAYTON APP CON	SPRINGFIELD TOWER ★	GND CON	UNICOM
134.975	257.875	118.85 127.225 327.1	120.7 (CTAF) L 291.775	121.7 225.4	122.95



Maximum holding airspeed 230 KIAS

HIRL Rwy 6-24 L
MIRL Rwy 15-33 L
REIL Rwys 6, 15 and 33 L

FAF to MAP 5.7 NM					
Knots	60	90	120	150	180
Min:Sec	5:42	3:48	2:51	2:17	1:54

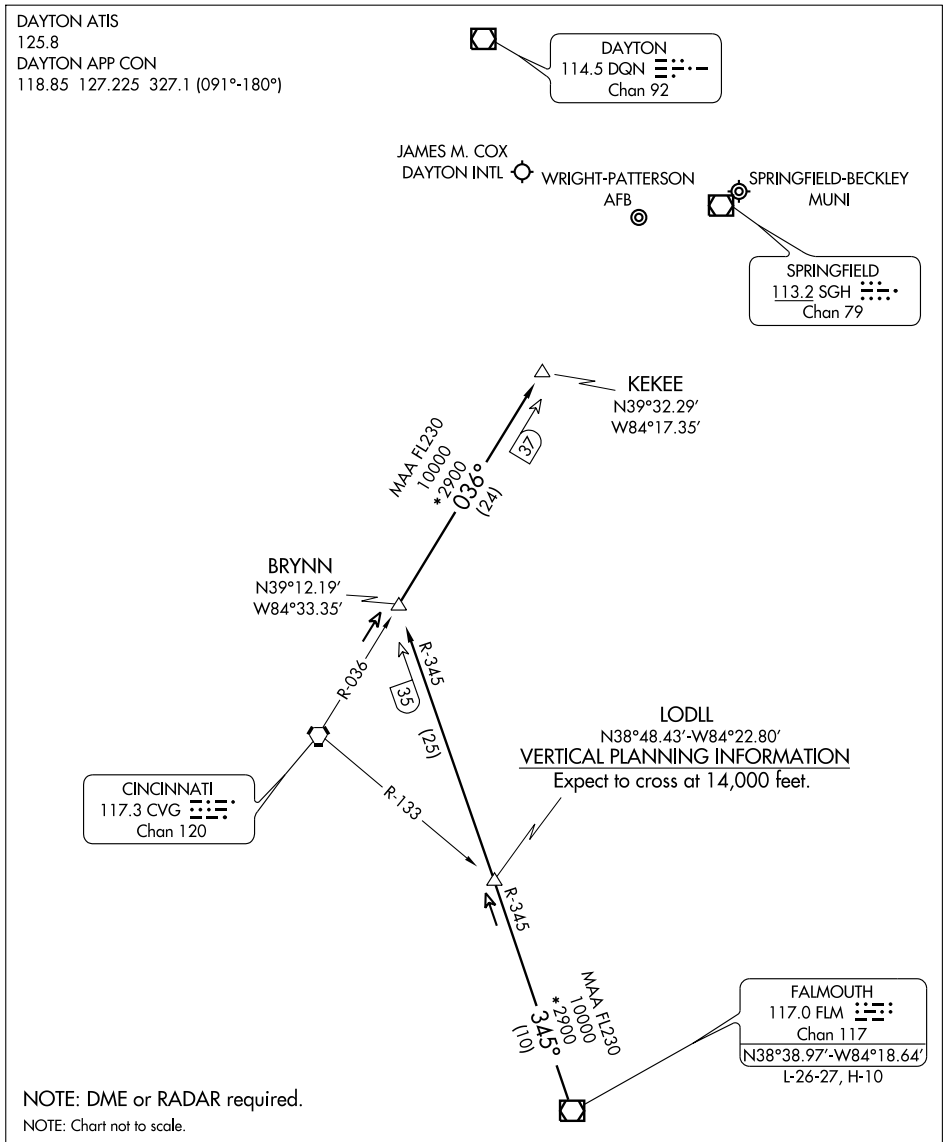
CATEGORY	A	B	C	D	E
S-ILS 24	1248-½ 200 (200-½)				
S-LOC 24	1600-½ 552 (600-½)		1600-1 552 (600-1)	1600-1¼ 552 (600-1¼)	1600-1½ 552 (600-1½)
CIRCLING	1600-1 549 (600-1)		1600-1½ 549 (600-1½)	1620-2 569 (600-2)	1900-3 849 (900-3)
COBAG FIX MINIMUMS					
S-LOC 24	1420-½ 372 (400-½)			1420-¾ 372 (400-¾)	
CIRCLING	1480-1 429 (500-1)	1520-1 469 (500-1)	1520-1½ 469 (500-1½)	1620-2 569 (600-2)	1900-3 849 (900-3)

(KEKEE.KEKEE3) 09183

KEKEE THREE ARRIVAL

ST-107 (FAA)

DAYTON, OHIO



FALMOUTH TRANSITION (FLM.KEKEE3): From over FLM VOR/DME via FLM R-345 to BRYNN INT, then via CVG R-036 to KEKEE INT. Thence. . . .

. . . . From over KEKEE INT: Expect radar vectors to join final approach course.

EC-2, 14 JAN 2010 to 11 FEB 2010

NDB CCJ 341	APP CRS 240°	Rwy ldg 9009 TDZE 1048 Apt Elev 1051

NDB RWY 24

SPRINGFIELD-BECKLEY MUNI (SGH)

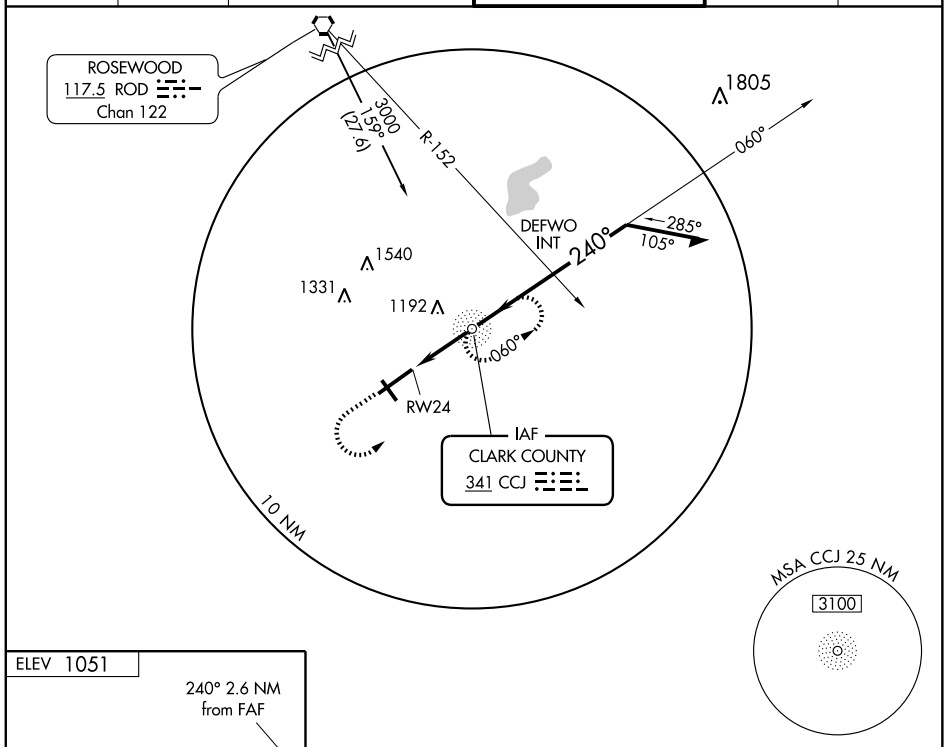
When local altimeter setting not received, use Wright-Patterson AFB altimeter setting and increase all MDA 60 feet and S-24 Cats C and D visibility ¼ mile.

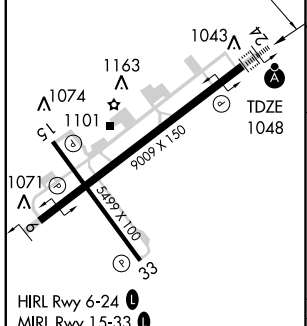
NA

ALSF-2

MISSED APPROACH: Climb to 2900 then left turn direct CCJ NDB and hold.

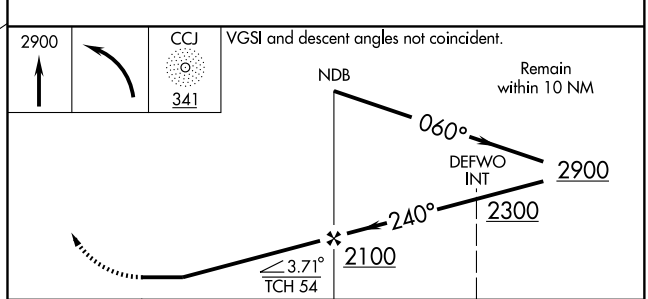
ASOS	ATIS	DAYTON APP CON	SPRINGFIELD TOWER ★	GND CON	UNICOM
134.975	257.875	118.85 127.225 327.1	120.7 (CTAF) L 291.775	121.7 225.4	122.95





HIRL Rwy 6-24 L
MIRL Rwy 15-33 L
REIL Rwys 6, 15 and 33 L

FAF to MAP 2.6 NM					
Knots	60	90	120	150	180
Min:Sec	2:36	1:44	1:18	1:02	0:52



CATEGORY	A	B	C	D
S-24	1500-¾ 452 (500-¾)			1500-1¼ 452 (500-1¼)
CIRCLING	1500-1 449 (500-1)	1520-1 469 (500-1)	1520-1½ 469 (500-1½)	1620-2 569 (600-2)

EC-2, 14 JAN 2010 to 11 FEB 2010

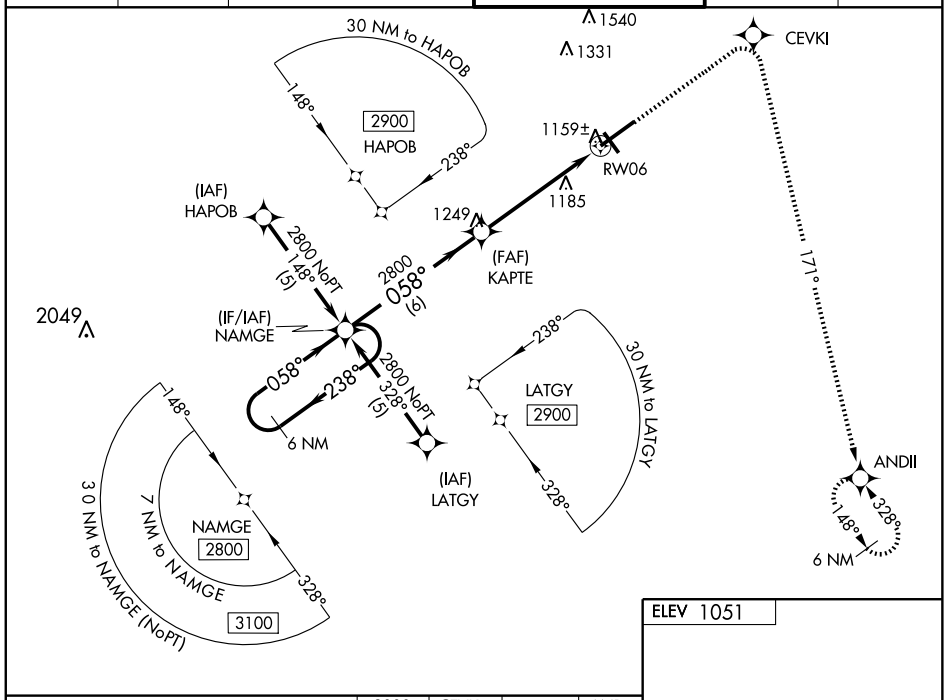
WAAS CH 58115 W06A	APP CRS 058°	Rwy ldg 9009 TDZE 1051 Apt Elev 1051

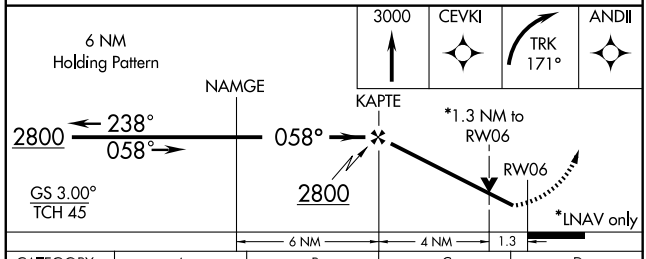
RNAV (GPS) RWY 6
SPRINGFIELD-BECKLEY MUNI (SGH)

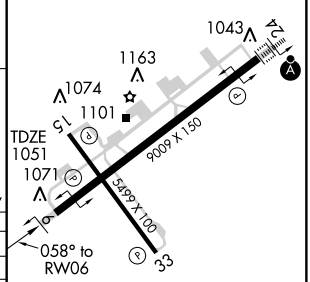
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Wright-Patterson AFB altimeter setting and increase all DA 55 feet and all MDA 60 feet, and increase LPV all Cats, LNAV/VNAV all Cats, and LNAV Cat C visibilities ¼ mile. VDP and Baro-VNAV NA when using Wright-Patterson AFB altimeter setting.

MISSED APPROACH: Climb to 3000 direct CEVKI and right turn via track 171° to ANDII and hold.

ASOS	ATIS	DAYTON APP CON	SPRINGFIELD TOWER ★	GND CON	UNICOM
134.975	257.875	118.85 127.225 327.1	120.7 (CTAF) L 291.775	121.7 225.4	122.95







CATEGORY	A	B	C	D
LPV DA	1354-1 303 (400-1)			
LNAV/VNAV DA	1429-1¼ 378 (400-1¼)			
LNAV MDA	1500-1 449 (500-1)		1500-1¼ 449 (500-1¼)	1500-1½ 449 (500-1½)
CIRCLING	1500-1 449 (500-1)	1520-1 469 (500-1)	1520-1½ 469 (500-1½)	1620-2 569 (600-2)

HIRL Rwy 6-24 L
MIRL Rwy 15-33 L
REIL Rwys 6, 15 and 33 L

EC-2, 14 JAN 2010 to 11 FEB 2010

WAAS CH 97615 W24A	APP CRS 238°	Rwy ldg 9009 TDZE 1048 Apt Elev 1051

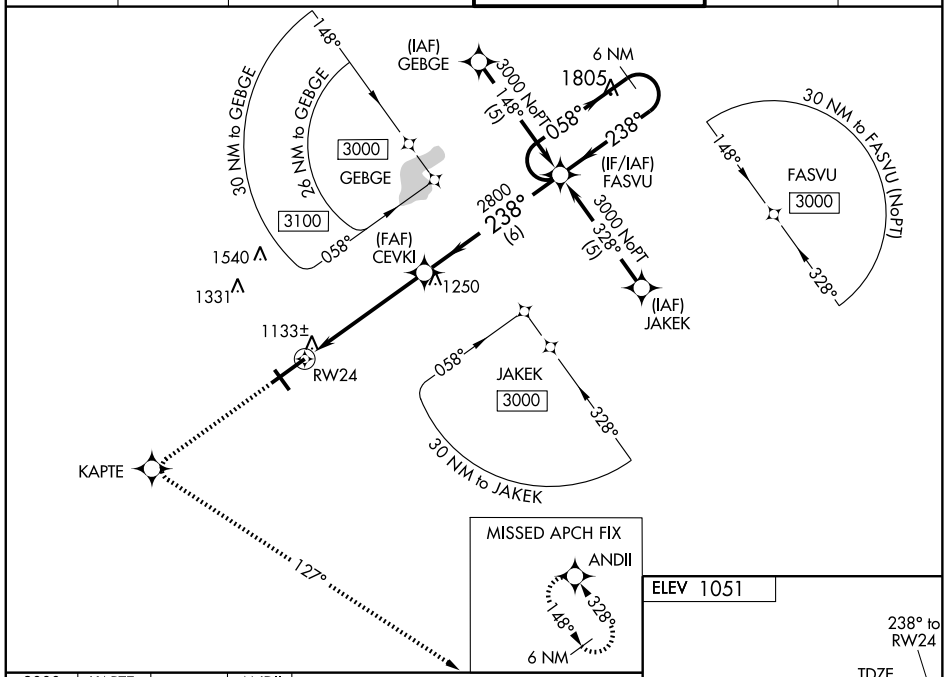
RNAV (GPS) RWY 24
SPRINGFIELD-BECKLEY MUNI (SGH)

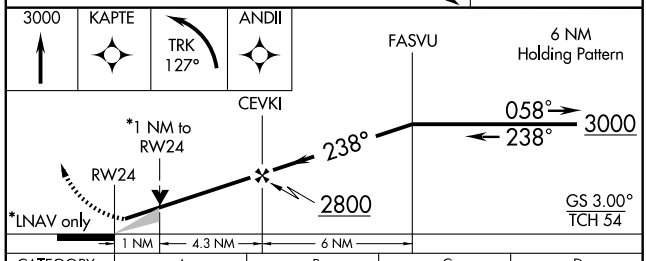
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use Wright-Patterson AFB altimeter setting and increase all DA 55 feet and all MDA 60 feet, LNAV/VNAV all Cats and LNAV Cat C visibilities ¼ mile. For inoperative ALSF-2/SSALR, increase LNAV Cat D visibility to 1¼ mile. For inoperative ALSF-2/SSALR, when using Wright-Patterson AFB altimeter setting, increase LPV all Cats visibility to 1 mile and LNAV Cat D visibility to 1¼ mile. ALSF-2 reverts to SSALR when tower is closed. VDP and Baro-VNAV NA when using Wright-Patterson AFB altimeter setting.

ALSF-2

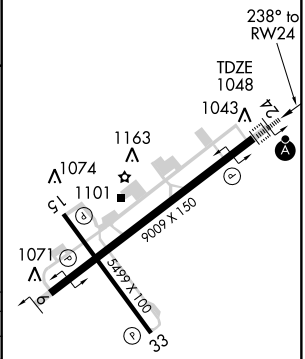
MISSED APPROACH: Climb to 3000 direct KAPTE and left turn via track 127° to ANDII and hold.

ASOS	ATIS	DAYTON APP CON	SPRINGFIELD TOWER ★	GND CON	UNICOM
134.975	257.875	118.85 127.225 327.1	120.7 (CTAF) L 291.775	121.7 225.4	122.95





ELEV 1051



CATEGORY	A	B	C	D
LPV DA	1248-½ 200 (200-½)			
LNAV/VNAV DA	1398-¾ 350 (400-¾)			
LNAV MDA	1400-½ 352 (400-½)			1400-1 352 (400-1)
CIRCLING	1480-1 429 (500-1)	1520-1 469 (500-1)	1520-1½ 469 (500-1½)	1620-2 569 (600-2)

HIRL Rwy 6-24 L
MIRL Rwy 15-33 L
REIL Rwys 6, 15 and 33 L

EC-2, 14 JAN 2010 to 11 FEB 2010

TACAN RWY 6

TACAN	XSF	APCH CRS	Rwy ldg	9009
Chan	65	066°	TDZE	1052
			Arpt Elev	1051

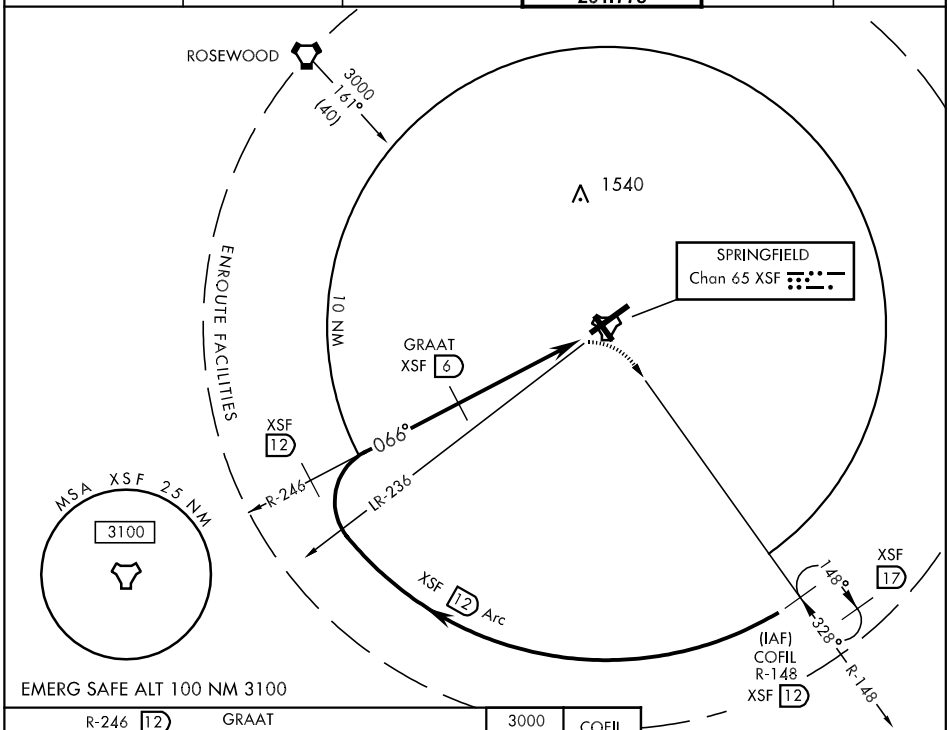
AL-958 [USAF]

SPRINGFIELD-BECKLEY MUNI (KSGH)

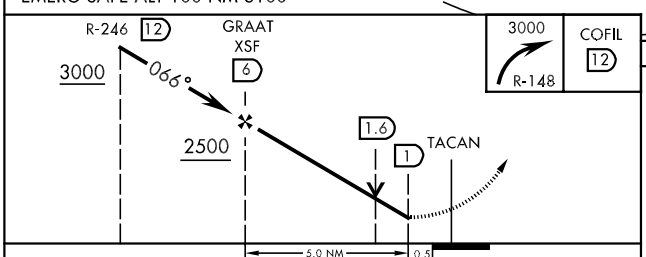
When control tower closed, use Wright-Patterson AFB altimeter setting.

MISSED APPROACH: Climbing right turn to 3000 via XSF R-148 to COFIL 12 DME and hold.

ATIS	ASOS	DAYTON APP CON	SPRINGFIELD TOWER ★	GND CON	UNICOM
257.875	134.975	118.85 269.275	120.7 (CTAF) L 291.775	121.7 225.4	122.95

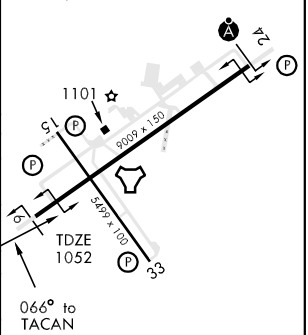


EMERG SAFE ALT 100 NM 3100



ELEV 1051

MIRL Rwy 15-33 L
REIL Rwy 6, 15 and 33 L
HIRL Rwy 6-24 L



CATEGORY	A	B	C	D
S-6	1440-1	388	(400-1)	1440-1¼ 388 (400-1¼)
CIRCLING	1480-1 428 (500-1)	1520-1 468 (500-1)	1520-1½ 468 (500-1½)	1620-2 568 (600-2)
WRIGHT-PATTERSON AFB ALTIMETER SETTING MINIMUMS				
S-6	1500-1 448	(500-1)	1500-1¼ 448 (500-1¼)	1500-1½ 448 (500-1½)
CIRCLING	1540-1 488 (500-1)	1560-1 508 (600-1)	1560-1½ 508 (600-1½)	1660-2 608 (700-2)

TACAN RWY 24

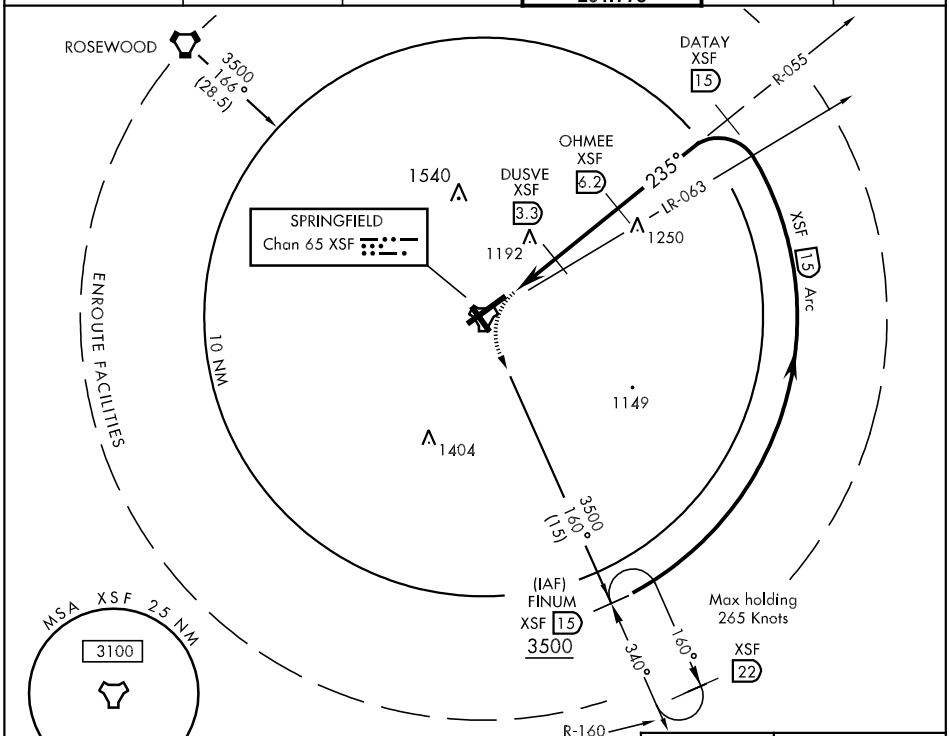
TACAN XSF Chan 65	APCH CRS 235°	Rwy ldg 9009 TDZE 1048 Arpt Elev 1051	AL-958 [USAF]	SPRINGFIELD-BECKLEY MUNI (KSGH)

* When ALS/SSALR inop, increase CAT E vis ½ mile.
NA ALSF-2 reverts to SSALR when tower is closed.

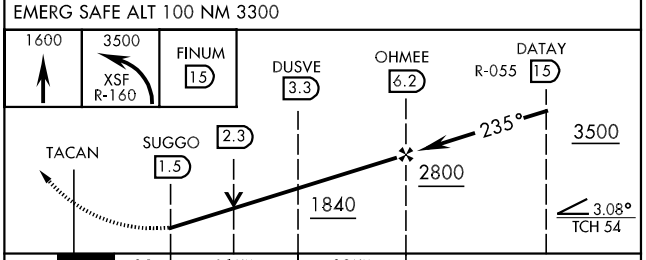
ALSF-2

MISSED APPROACH: Climb to 1600 then climbing left turn to 3500 via XSF TACAN R-160 to FINUM/XSF 15 DME and hold.

ATIS	ASOS	DAYTON APP CON	SPRINGFIELD TOWER *	GND CON	UNICOM
257.875	134.975	118.85 269.275	120.7 (CTAF) 291.775	121.7 225.4	122.95

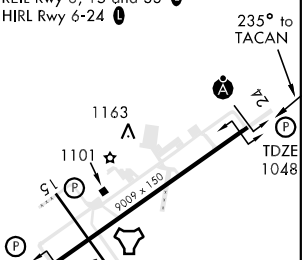


EMERG SAFE ALT 100 NM 3300



ELEV 1051

MIRL Rwy 15-33
REIL Rwy 6, 15 and 33
HIRL Rwy 6-24



CATEGORY	A	B	C	D	E
S-24 *	1500-½ 452 (500-½)		1500-¾ 452 (500-¾)	1500-1	452 (500-1)
CIRCLING	1500-1 449 (500-1)	1520-1 469 (500-1)	1520-1½ 469 (500-1½)	1620-2 569 (600-2)	1900-3 849 (900-3)

VOR/DME SGH 113.2 Chan 79	APP CRS 323°	Rwy ldg 5499 TDZE 1047 Apt Elev 1051

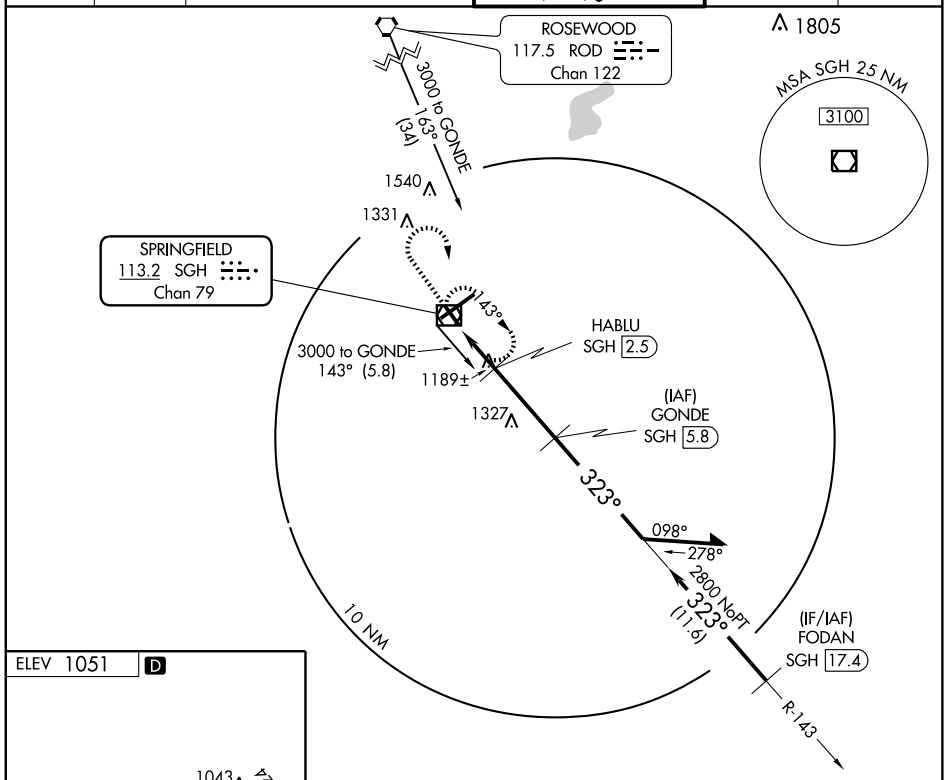
VOR/DME RWY 33
SPRINGFIELD-BECKLEY MUNI (SGH)

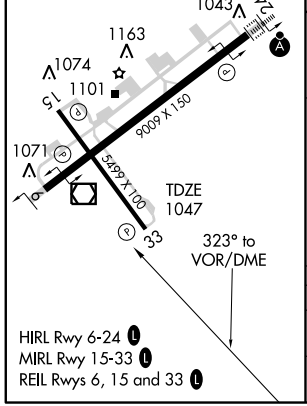
When local altimeter setting not received, use Wright-Patterson AFB altimeter setting and increase all MDAs 60 feet and increase Cat C/D visibility ¼ mile. Visibility reduction by helicopters NA.

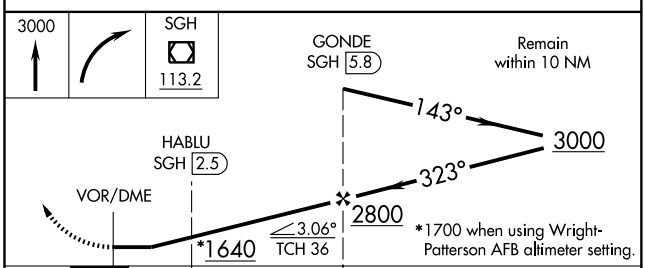
NA

MISSED APPROACH: Climb to 3000 then right turn direct SGH VOR/DME and hold.

ASOS	ATIS	DAYTON APP CON	SPRINGFIELD TOWER ★	GND CON	UNICOM
134.975	257.875	126.5 327.1	120.7 (CTAF) L 291.775	121.7 225.4	122.95







CATEGORY	A	B	C	D
S-33	1440-1 393 (400-1)			1440-1¼ 393 (400-1¼)
CIRCLING	1480-1 429 (500-1)	1520-1 469 (500-1)	1520-1½ 469 (500-1½)	1620-2 569 (600-2)

EC-2, 14 JAN 2010 to 11 FEB 2010

VOR RWY 6

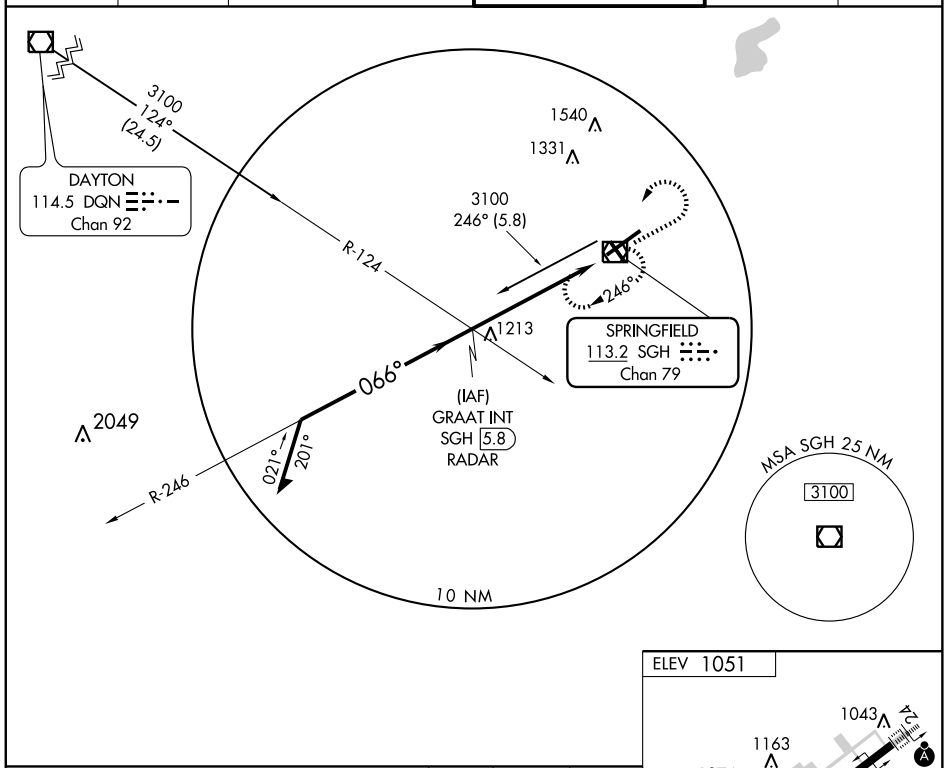
SPRINGFIELD-BECKLEY MUNI (SGH)

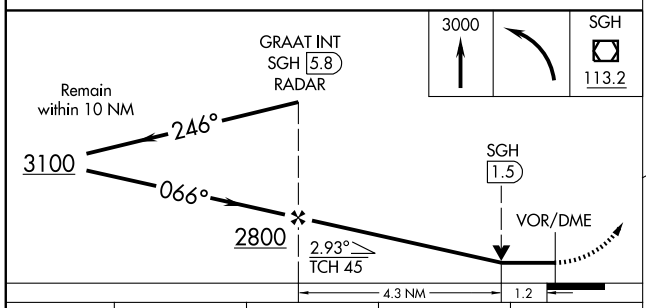
VOR/DME SGH	APP CRS	Rwy ldg	9009
113.2	066°	TDZE	1051
Chan 79		Apt Elev	1051

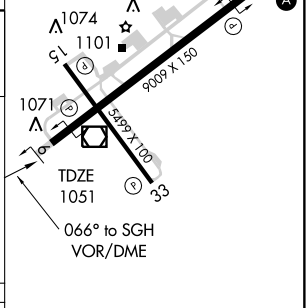
Visibility reduction by helicopters NA. When local altimeter setting not received, use Wright-Patterson AFB altimeter setting and increase all MDA 60 feet. VDP NA when using Wright-Patterson AFB altimeter setting.

MISSED APPROACH: Climb to 3000, then left turn direct SGH VOR/DME and hold.

ASOS	ATIS	DAYTON APP CON	SPRINGFIELD TOWER ★	GND CON	UNICOM
134.975	257.875	118.85 127.225 327.1	120.7 (CTAF) L 291.775	121.7 225.4	122.95







CATEGORY	A	B	C	D
S-6	1480-1 429 (500-1)		1480-1¼ 429 (500-1¼)	1480-1½ 429 (500-1½)
CIRCLING	1480-1 429 (500-1)	1520-1 469 (500-1)	1520-1½ 469 (500-1½)	1620-2 569 (600-2)

HIRL Rwy 6-24 L
MIRL Rwy 15-33 L
REIL Rwys 6, 15 and 33 L

EC-2, 14 JAN 2010 to 11 FEB 2010

VOR/DME SGH 113.2 Chan 79	APP CRS 235°	Rwy ldg 9009 TDZE 1048 Apt Elev 1051

VOR RWY 24

SPRINGFIELD-BECKLEY MUNI (SGH)

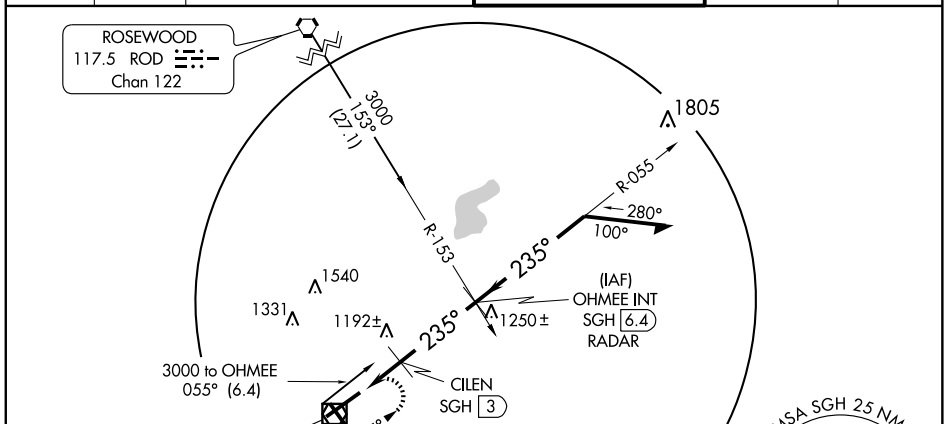
When local altimeter setting not received, use Wright-Patterson AFB altimeter setting and increase all MDAs 60 feet and increase S-24 Cats C and D and Circling Cat C visibility ¼ mile. VDP NA when using Wright-Patterson AFB altimeter setting. ALSF-2 reverts to SSALR when tower is closed. For inoperative ALSF-2/SSALR, increase CILEN fix minimums S-24 Cat D visibility to 1¼, when using Wright-Patterson AFB altimeter setting increase CILEN fix minimums S-24 Cat D visibility to 1½.

NA

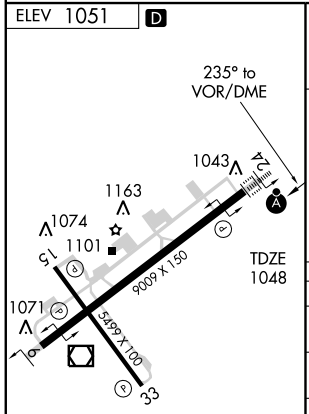
ALSF-2

MISSED APPROACH: Climb to 3000 then left turn direct SGH VOR/DME and hold.

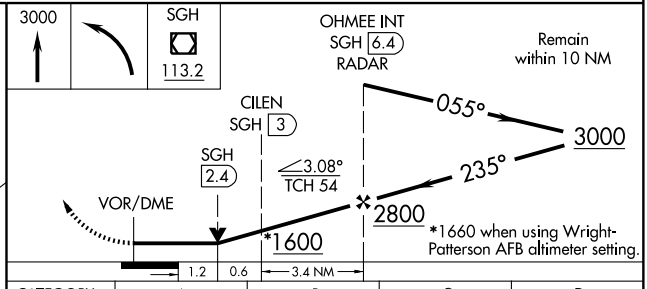
ASOS	ATIS	DAYTON APP CON	SPRINGFIELD TOWER ★	GND CON	UNICOM
134.975	257.875	126.5 327.1	120.7 (CTAF) L 291.775	121.7 225.4	122.95



ELEV 1051 D



HIRL Rwy 6-24 L
MIRL Rwy 15-33 L
REIL Rwys 6, 15 and 33 L



CATEGORY	A	B	C	D
S-24	1600-½ 552 (600-1)		1600-1 552 (600-1)	1600-1¼ 552 (600-1¼)
CIRCLING	1600-1 549 (600-1)		1600-1½ 549 (600-1½)	1620-2 569 (600-2)
CILEN FIX MINIMUMS				
S-24	1460-½ 412 (500-½)		1460-¾ 412 (500-¾)	1460-1 412 (500-1)
CIRCLING	1480-1 429 (500-1)	1520-1 469 (500-1)	1520-1½ 469 (500-1½)	1620-2 569 (600-2)

EC-2, 14 JAN 2010 to 11 FEB 2010

VOR/DME AIR	APP CRS	Rwy ldg	N/A
117.1	297°	TDZE	N/A
Chan 118		Apt Elev	1187

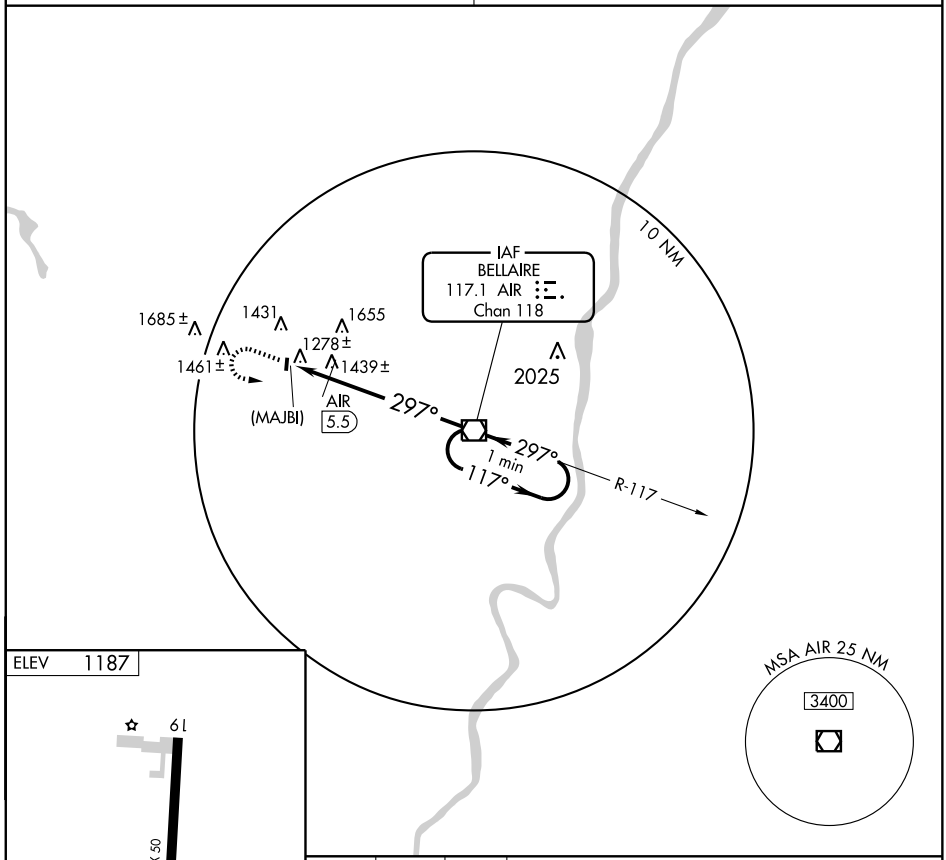
VOR or GPS-A

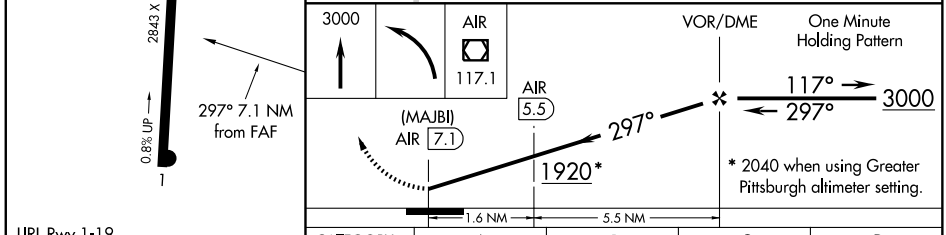
ST. CLAIRSVILLE / ALDERMAN (2P7)

Use Wheeling, WV altimeter setting; when not received, use Greater Pittsburgh altimeter setting and increase all MDAs 120 feet and Cat B visibility ¼ mile.
NA Procedure NA at night except by prior arrangement for runway lights.

MISSED APPROACH: Climb to 3000 then left turn direct AIR VOR/DME and hold.

CLEVELAND CENTER	CTAF
120.4 257.975	122.9





LIRL Rwy 1-19

FAF to MAP 7.1 NM					
Knots	60	90	120	150	180
Min:Sec	7:06	4:44	3:33	2:50	2:22

CATEGORY	A	B	C	D
CIRCLING	1920-1 733 (800-1)		NA	
DME MINIMUMS				
CIRCLING	1800-1 613 (700-1)		NA	

EC-2. 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	4400
142°	TDZE	1194
	Apt Elev	1194

GPS RWY 14

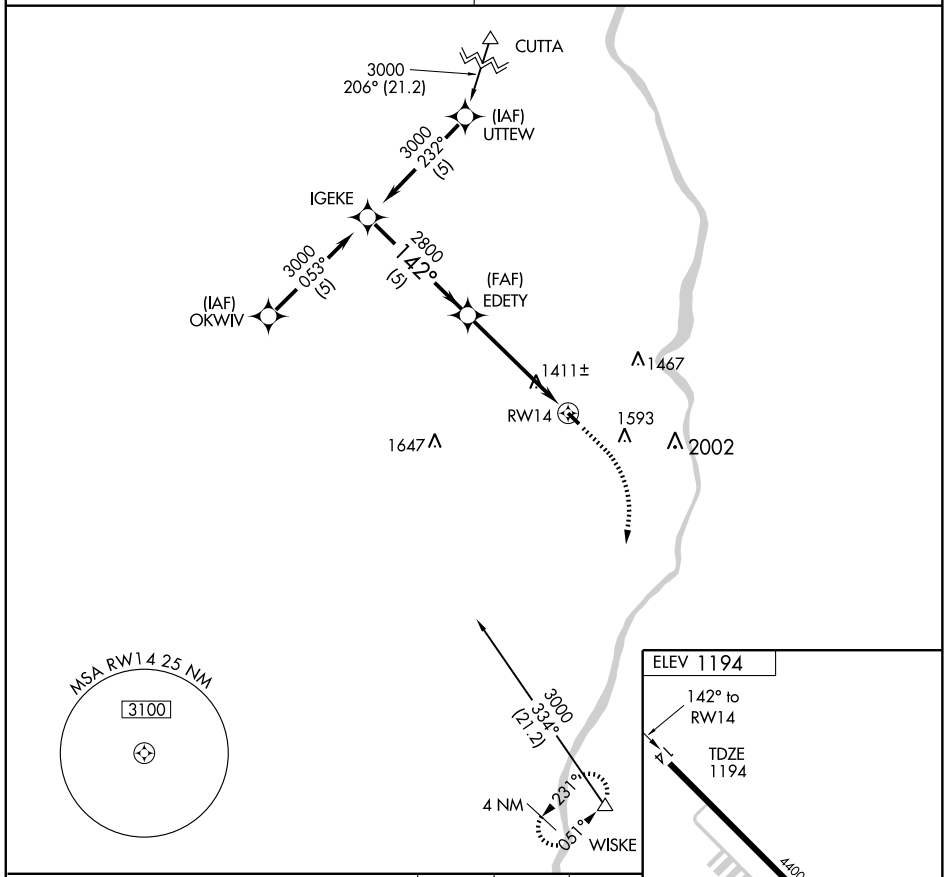
STEUBENVILLE/JEFFERSON COUNTY AIRPARK (2G2)

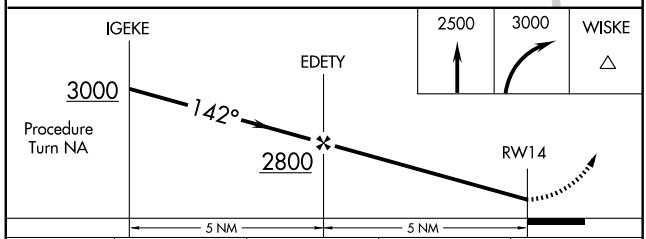
NA

Use Wheeling, WV altimeter setting, when not received procedure NA.

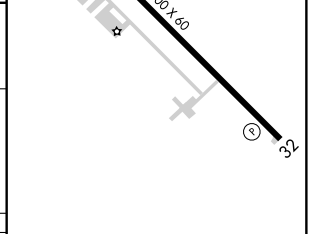
MISSED APPROACH: Climb to 2500, then climbing right turn to 3000 direct WISKE WP and hold.

PITTSBURGH APP CON	UNICOM
124.750 338.2	122.8 (CTAF) L





CATEGORY	A	B	C	D
S-14	1740-1	546 (600-1)	NA	
CIRCLING	1780-1	586 (600-1)	NA	



REIL Rwy 32 L
MIRL Rwy 14-32 L

APP CRS	Rwy ldg	4400
322°	TDZE	1194
	Apt Elev	1194

GPS RWY 32

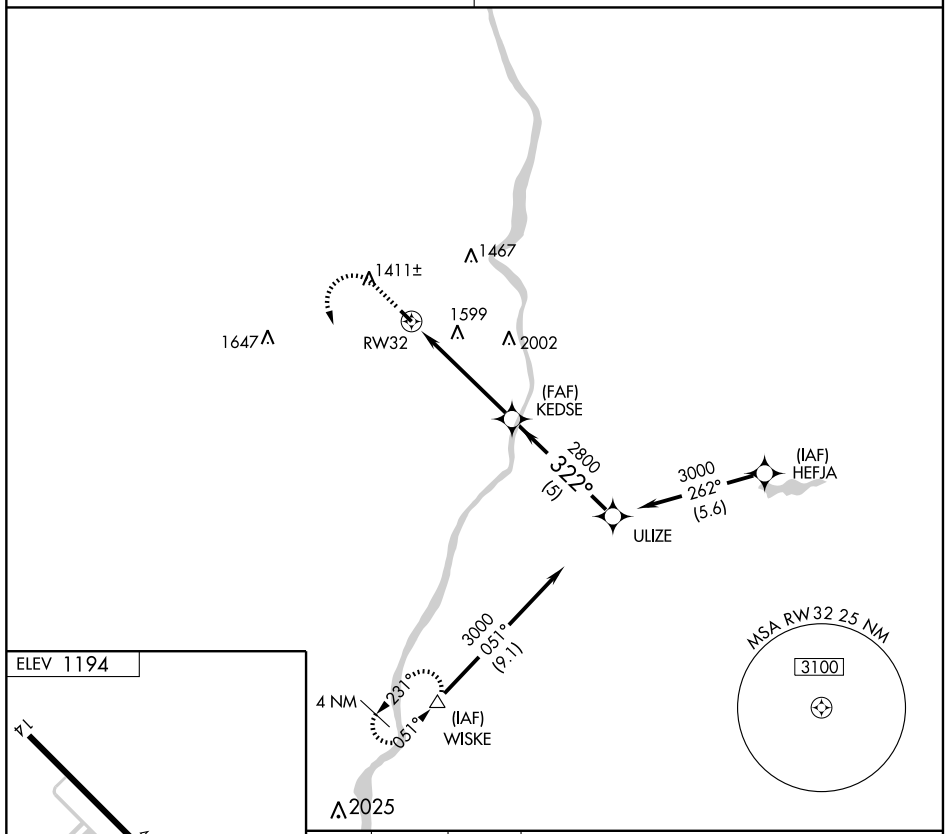
STEUBENVILLE/JEFFERSON COUNTY AIRPARK (2G2)

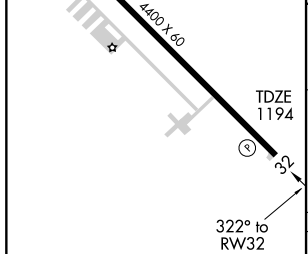
NA

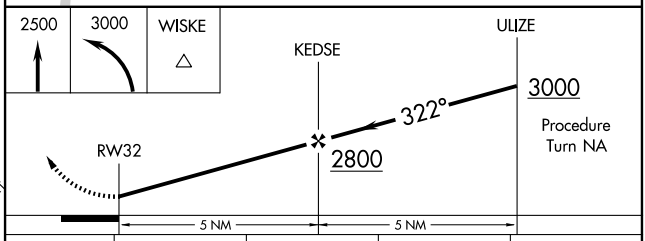
Use Wheeling, WV altimeter setting, when not received procedure NA.

MISSED APPROACH: Climb to 2500, then climbing left turn to 3000 direct WISKE WP and hold.

PITTSBURGH APP CON	UNICOM
124.750 **338.2**	**122.8** (CTAF) L







CATEGORY	A	B	C	D
S-32	1940-1 746 (800-1)	1940-1¼ 746 (800-1¼)	NA	
CIRCLING	1940-1 746 (800-1)	1940-1¼ 746 (800-1¼)	NA	

REIL Rwy 32 L
MIRL Rwy 14-32 L

NDB TII 269	APP CRS 250°	Rwy ldg 3885 TDZE 785 Apt Elev 786

NDB RWY 24

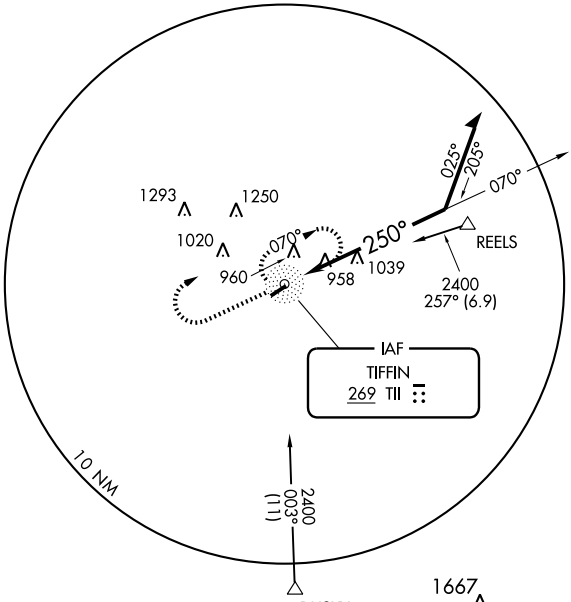
TIFFIN / SENECA COUNTY (16G)

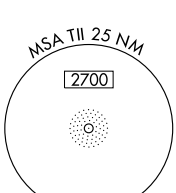
Obtain local altimeter setting on CTAF; when not received, use Findlay altimeter setting.

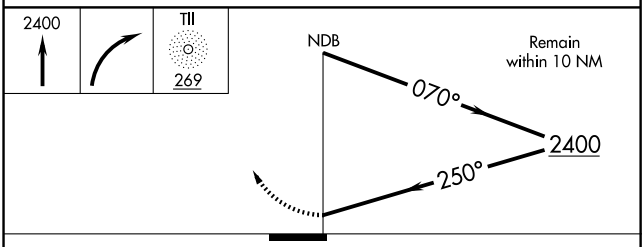
NA

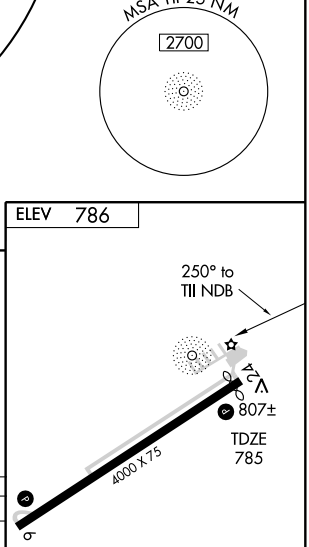
MISSED APPROACH: Climb to 2400, then right turn direct TII NDB and hold.

AWOS-3	FINDLAY ASOS	TOLEDO APP CON	UNICOM
121.175	124.425	120.8 317.55	123.0 (CTAF) L









CATEGORY	A	B	C	D
S-24	1420-1 635 (700-1)		1420-1¾ 635 (700-1¾)	1420-2 635 (700-2)
CIRCLING	1420-1 634 (700-1)		1420-1¾ 634 (700-1¾)	1420-2 634 (700-2)
FINDLAY ALTIMETER SETTING MINIMUMS				
S-24	1460-1 675 (700-1)		1460-2 675 (700-2)	1460-2¼ 675 (700-2¼)
CIRCLING	1460-1 674 (700-1)		1460-2 674 (700-2)	1460-2¼ 674 (700-2¼)

MIRL Rwy 6-24 L
REIL Rwys 6 and 24 L

EC-2, 14 JAN 2010 to 11 FEB 2010

WAAS CH 77713 W06A	APP CRS 061°	Rwy ldg 4000 TDZE 786 Apt Elev 786

RNAV (GPS) RWY 6

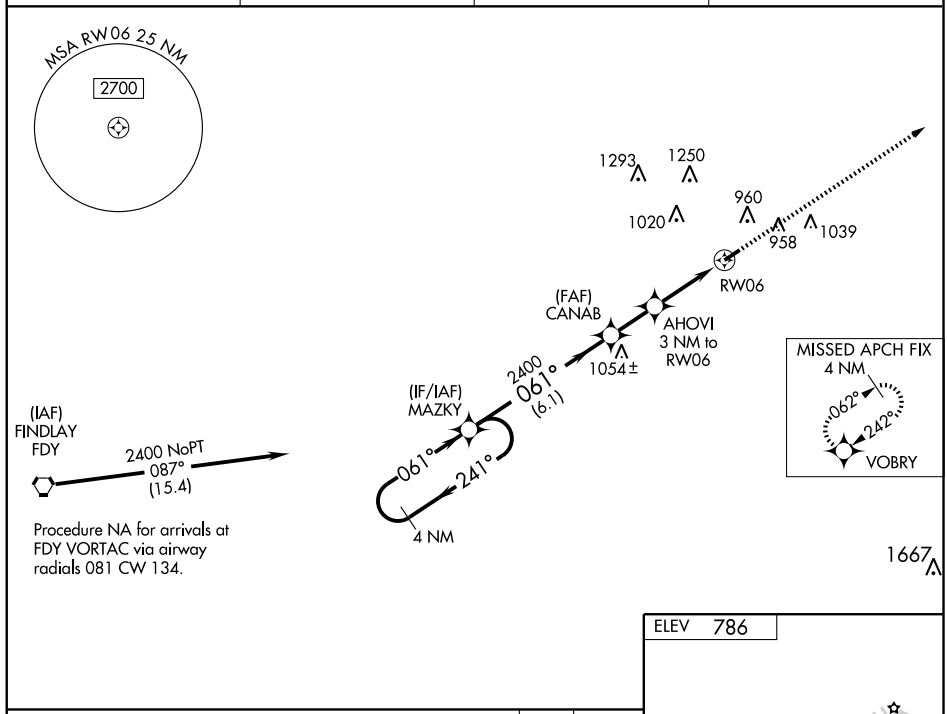
TIFFIN / SENECA COUNTY (16G)

T A NA

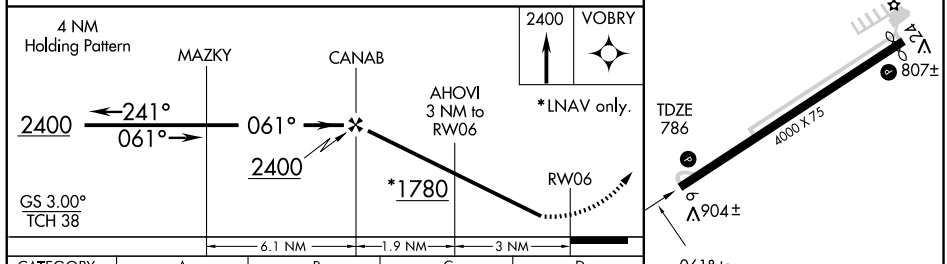
Baro-VNAV NA when using Findlay altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). DME/DME-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Findlay altimeter setting and increase all DA 53 feet and all MDA 60 feet, increase LPV all Cats visibilities ¼ mile and LNAV Cat C visibility ¼ mile. Straight-in/Circling Rwy 6 NA at night.

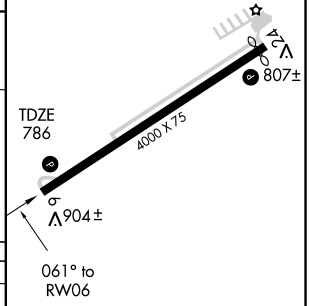
MISSED APPROACH: Climb to 2400 direct VOBRY and hold.

AWOS-3	FINDLAY ASOS	TOLEDO APP CON	UNICOM
121.175	124.425	120.8 317.55	123.0 (CTAF) L



Procedure NA for arrivals at FDY VORTAC via airway radials 081 CW 134.





CATEGORY	A	B	C	D
LPV DA	1137-1¼ 351 (400-1¼)			NA
LNAV/VNAV DA	1174-1½ 388 (400-1½)			NA
LNAV MDA	1160-1 374 (400-1)			NA
CIRCLING	1260-1 474 (500-1)		1260-1½ 474 (500-1½)	NA

MIRL Rwy 6-24 L
REIL Rwys 6 and 24 L

APP CRS	Rwy ldg	3885
242°	TDZE	785
	Apt Elev	786

RNAV (GPS) RWY 24

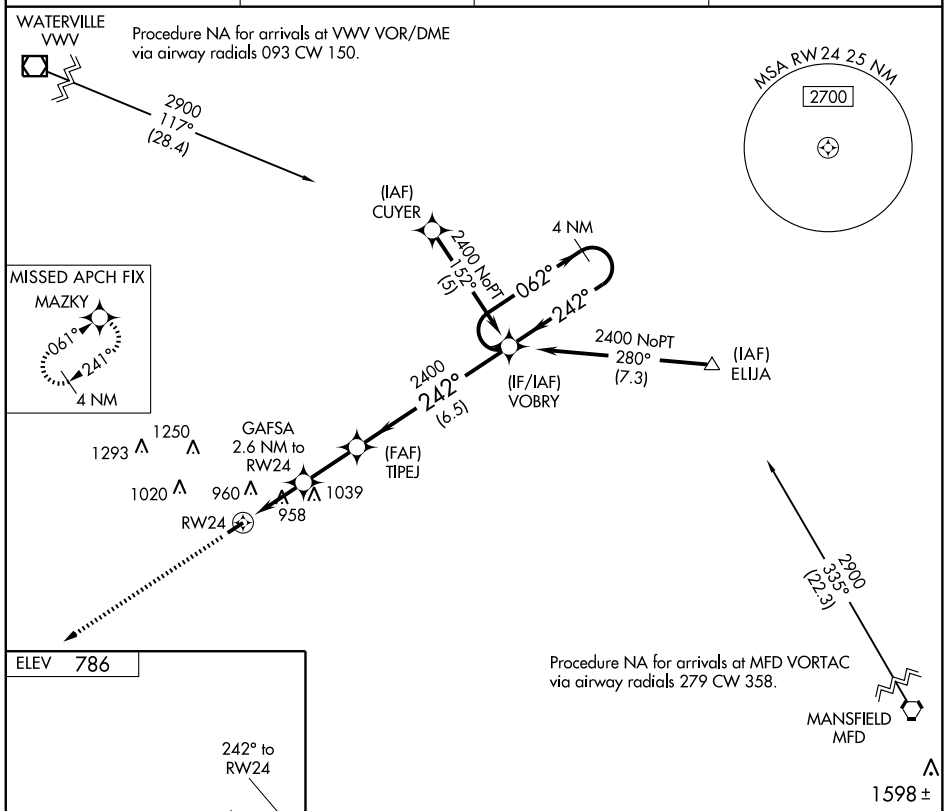
TIFFIN / SENECA COUNTY(16G)

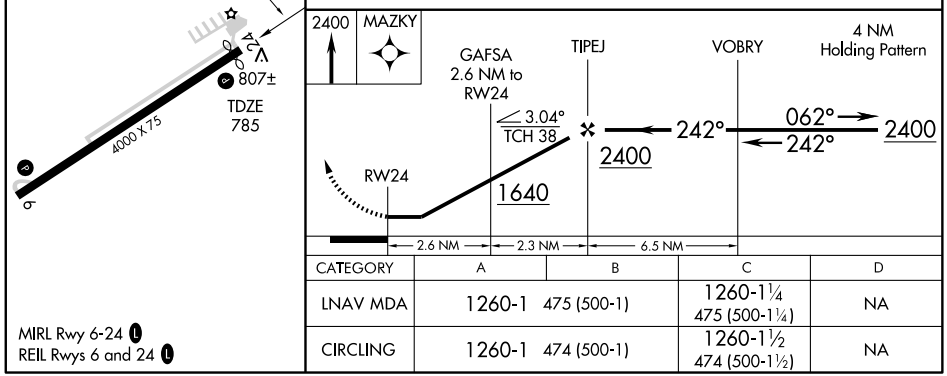
T NA

Circling to Rwy 6 NA at night. DME/DME RNP-0.3 NA.
Visibility reduction by helicopters NA. When local altimeter setting not received, use Findlay altimeter setting and increase all MDA 60 feet and LNAV Cat C visibilty ¼ mile.

MISSED APPROACH: Climb to 2400 direct MAZKY and hold.

AWOS-3	FINDLAY ASOS	TOLEDO APP CON	UNICOM
121.175	124.425	120.8 317.55	123.0 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	1260-1 475 (500-1)		1260-1¼ 475 (500-1¼)	NA
CIRCLING	1260-1 474 (500-1)		1260-1½ 474 (500-1½)	NA

MIRL Rwy 6-24 L
REIL Rwys 6 and 24 L

EC-2, 14 JAN 2010 to 11 FEB 2010

VORTAC FDY 108.2 Chan 19	APP CRS 073°	Rwy ldg 4000 TDZE 786 Apt Elev 786

VOR RWY 6

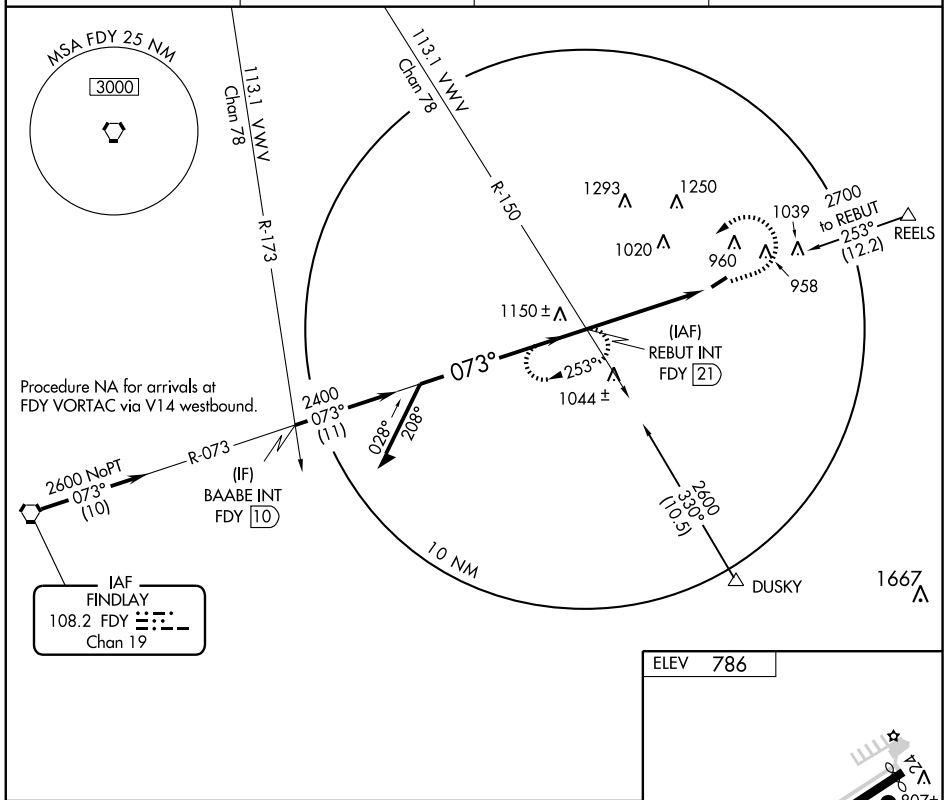
TIFFIN / SENECA COUNTY (16G)

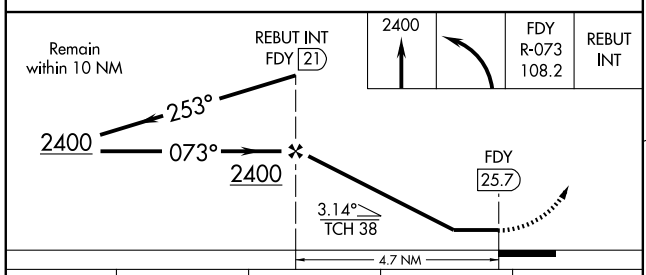
NA

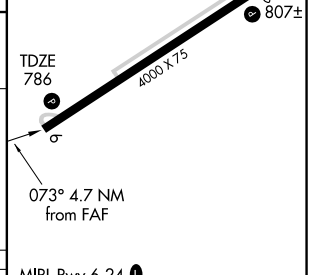
Visibility reduction by helicopters NA. When local altimeter setting not received, use Findlay altimeter setting and increase all MDA 60 feet and Cat C visibilities ¼ mile.

MISSED APPROACH: Climb to 2400 then left turn via FDY R-073 to REBUT INT/FDY 21 DME and hold.

AWOS-3	FINDLAY ASOS	TOLEDO APP CON	UNICOM
121.175	124.425	120.8 317.55	123.0 (CTAF) L







CATEGORY	A	B	C	D
S-6	1400-1 614 (700-1)	1400-1¼ 614 (700-1¼)	1400-1¾ 614 (700-1¾)	NA
CIRCLING	1400-1 614 (700-1)	1400-1¼ 614 (700-1¼)	1400-1¾ 614 (700-1¾)	NA

MIRL Rwy 6-24 L
REIL Rwys 6 and 24 L

FAF to MAP 4.7 NM					
Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

EC-2, 14 JAN 2010 to 11 FEB 2010

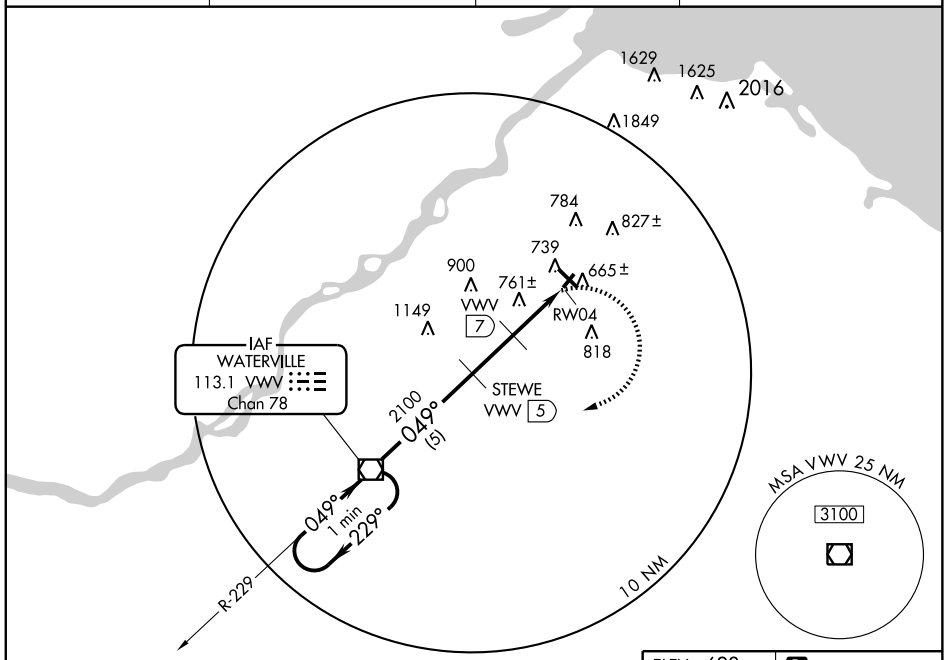
VOR/DME VWV 113.1 Chan 78	APP CRS 049°	Rwy ldg 3699 TDZE 622 Apt Elev 623

VOR/DME or GPS RWY 4

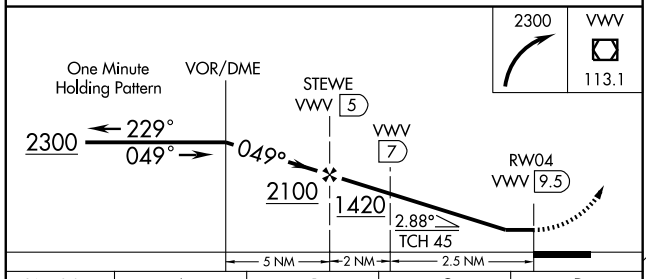
TOLEDO / METCALF FIELD (TDZ)

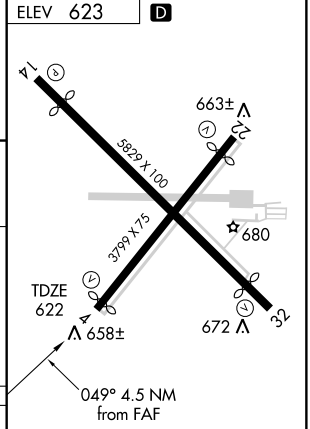
MISSED APPROACH: Climbing right turn to 2300 direct VWV VOR/DME and hold.

ASOS	TOLEDO APP CON	CLNC DEL	UNICOM
121.575	126.1 307.0	125.6	123.05 (CTAF) L



NoPT for arrivals on VWV VOR/DME airway radials 150 clockwise 308.





CATEGORY	A	B	C	D
S-4	1060-1 438 (500-1)		1060-1¼ 438 (500-1¼)	1060-1½ 438 (500-1½)
CIRCLING	1120-1 498 (500-1)		1120-1½ 498 (500-1½)	1180-2 558 (600-2)

REIL Rwys 4 and 22 L
MIRL Rwys 4-22 and 14-32

EC-2, 14 JAN 2010 to 11 FEB 2010

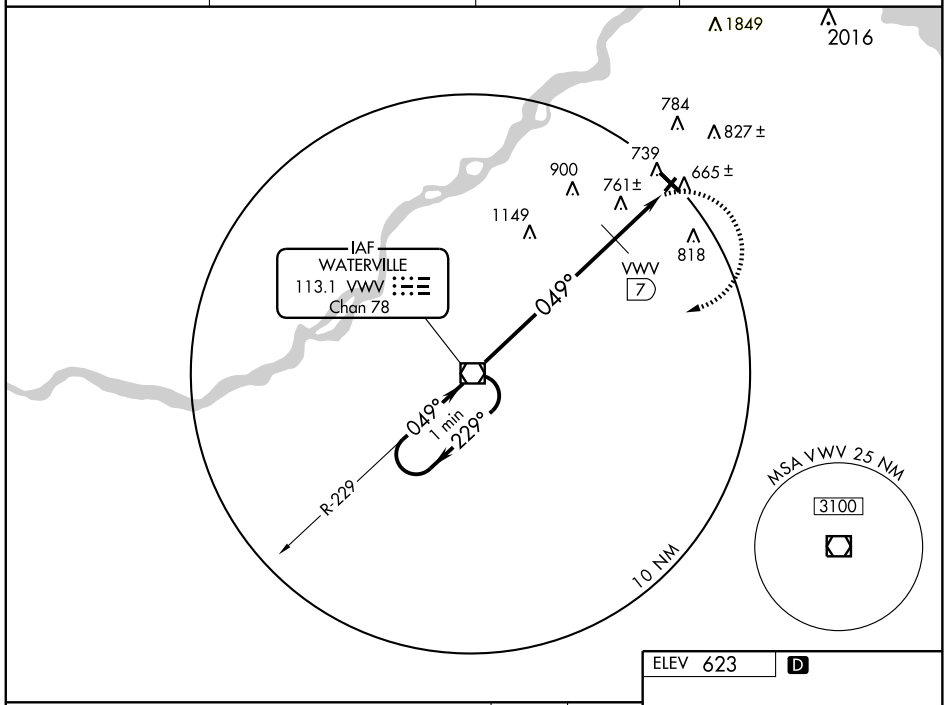
VOR/DME VWV 113.1 Chan 78	APP CRS 049°	Rwy ldg 3699 TDZE 622 Apt Elev 623

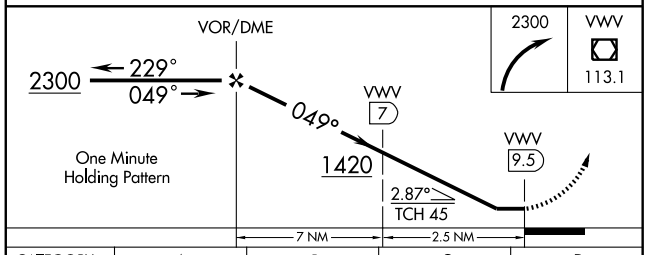
VOR RWY 4

TOLEDO/METCALF FIELD (TDZ)

MISSED APPROACH: Climbing right turn to 2300 direct VWV VOR/DME and hold.

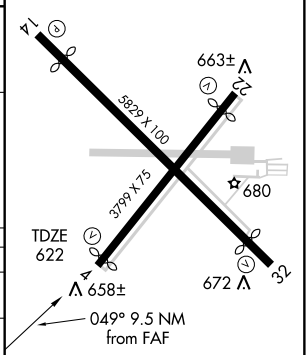
ASOS	TOLEDO APP CON	CLNC DEL	UNICOM
121.575	126.1 307.0	125.6	123.05 (CTAF) L





CATEGORY	A	B	C	D
S-4	1420-1 798 (800-1)	1420-1¼ 798 (800-1¼)	1420-2¼ 798 (800-2¼)	1420-2½ 798 (800-2½)
CIRCLING	1420-1 798 (800-1)	1420-1¼ 798 (800-1¼)	1420-2¼ 798 (800-2¼)	1420-2½ 798 (800-2½)
DME MINIMUMS				
S-4	1060-1 438 (500-1)		1060-1¼ 438 (500-1¼)	1060-1½ 438 (500-1½)
CIRCLING	1120-1 498 (500-1)		1120-1½ 498 (500-1½)	1180-2 558 (600-2)

ELEV 623 D



REIL Rwys 4 and 22 L
MIRL Rwys 4-22 and 14-32

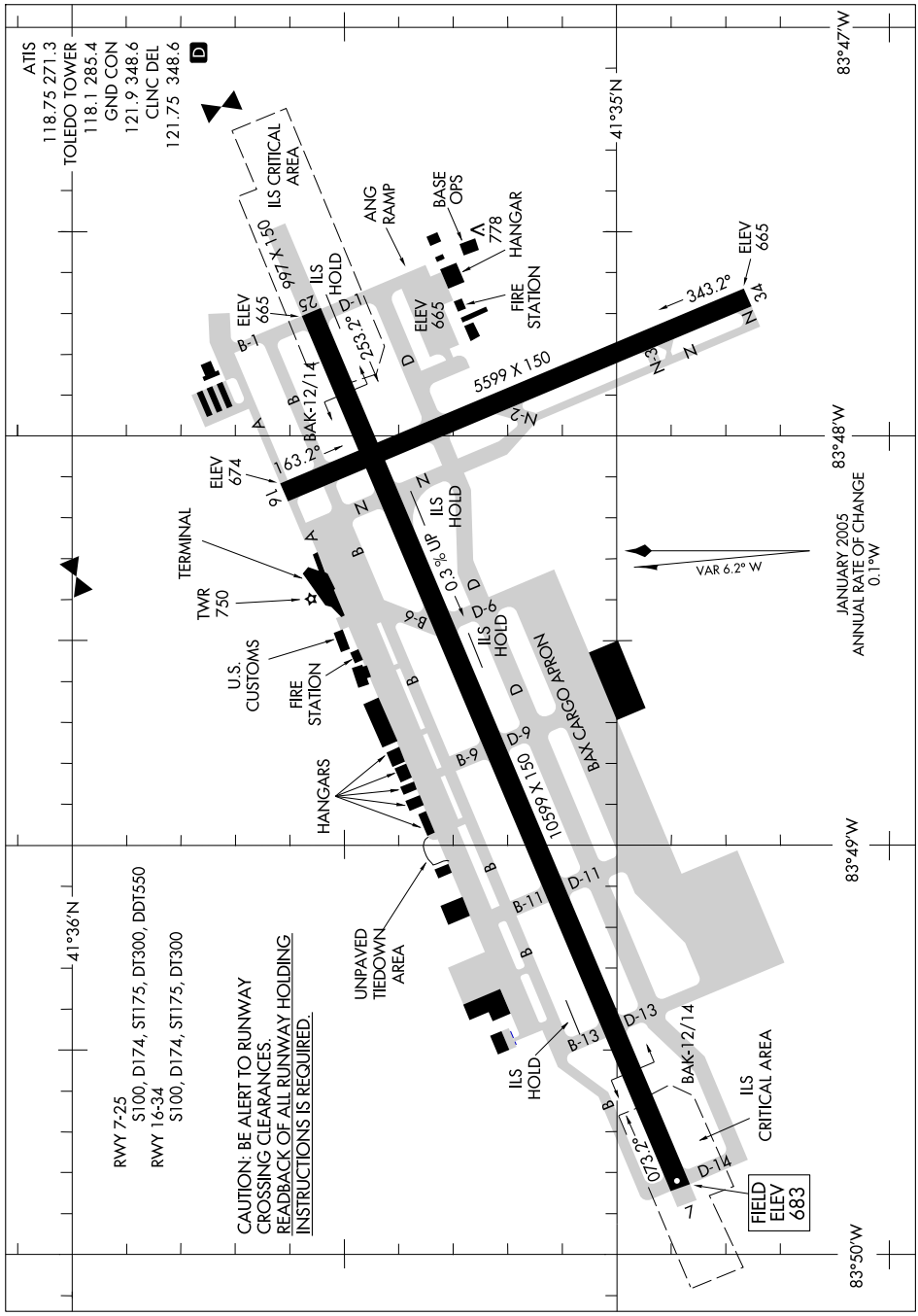
FAF to MAP 9.5 NM					
Knots	60	90	120	150	180
Min:Sec	9:30	6:20	4:45	3:48	3:10

EC-2, 14 JAN 2010 to 11 FEB 2010

AIRPORT DIAGRAM

AL-184 (FAA)

TOLEDO EXPRESS (TOL)
TOLEDO, OHIO



HI-ILS or LOC RWY 7

LOCALIZER I-TOL	APCH CRS	Rwy ldg / TDZE / Arpt Elev
109.7	072°	10,599 / 683 / 683

JAL-184 [USAF]

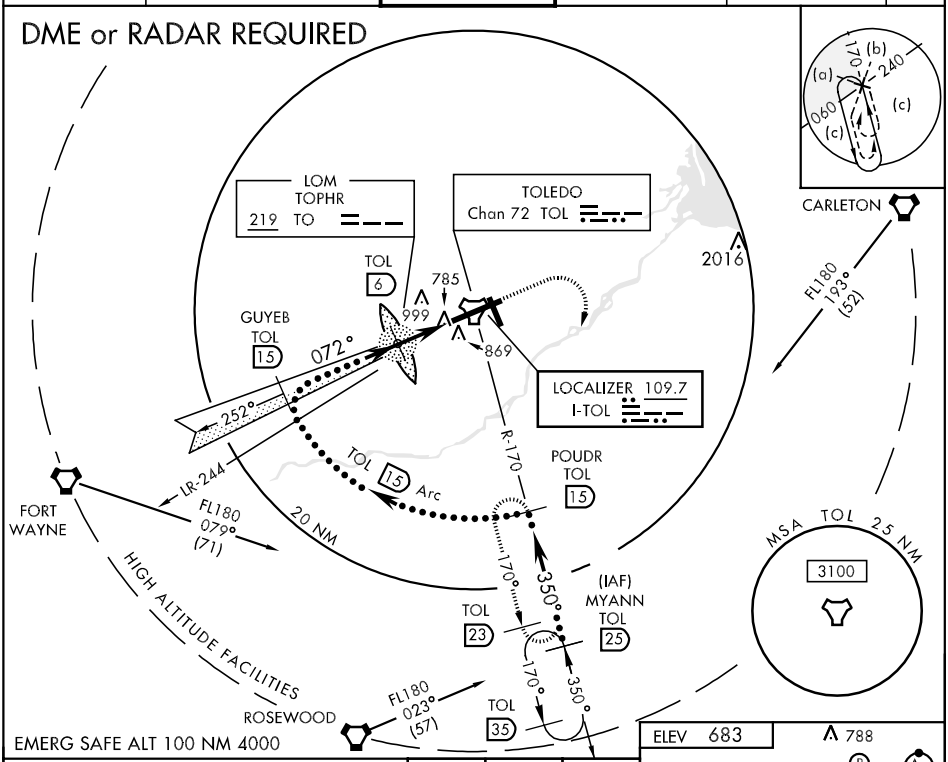
TOLEDO EXPRESS (KTOL)

* When ALS inop increase CAT E RVR to 40, vis to ¾ mile.
** When ALS inop increase CAT E vis to 1½ miles.

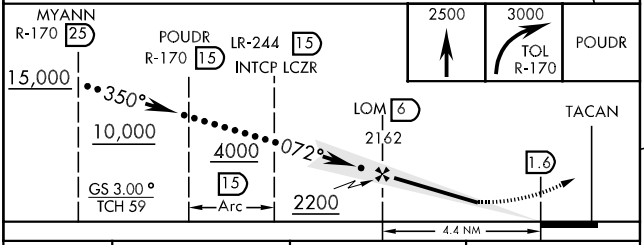
ALSF-2

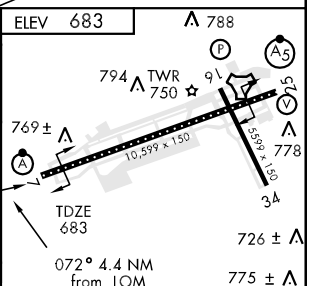
MISSED APPROACH: Climb to 2500, then climbing right turn to 3000 via TOL R-170 to POUDR and hold.

ATIS	TOLEDO APP CON	TOLEDO TOWER	GND CON	CLNC DEL	ASR
118.75 271.3	126.1 317.55	118.1 285.4	121.9 348.6	121.75	



EMERG SAFE ALT 100 NM 4000





HIRL Rwy 7-25
MIRL Rwy 16-34
REIL Rwy 16 and 34
TDZL/CL Rwy 7

CATEGORY	C	D	E
S-ILS 7 *	883/18 200 (200-½)		883/24 200 (200-½)
S-LOC 7 **	1080/24 397 (400-½)	1080/40 397 (400-¾)	1080/50 397 (400-1)
CIRCLING	1180-1½ 496 (500-1½)	1240-2 556 (600-2)	1400-2½ 716 (800-2½)
S-ASR 7	1080/24 397 (400-½)	1080/50 397 (400-1)	

FAF to LOC MAP 4.4 NM					
Knots	120	140	160	180	200
Min:Sec	2:12	1:53	1:39	1:28	1:19

HI-ILS or LOC RWY 25

LOCALIZER I-BQE	APCH CRS	Rwy ldg / TDZE / Arpt Elev
108.7	252°	10,599 / 678 / 683

JAL-184 [USAF]

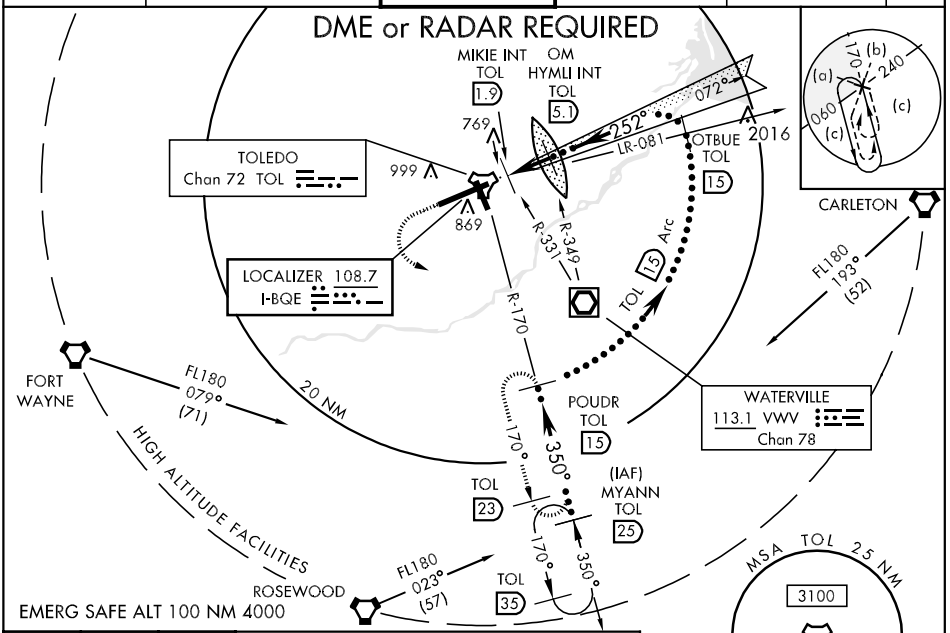
TOLEDO EXPRESS (KTOL)

* When ALS inop increase CAT E vis to ¾ mile.
** When ALS inop increase CAT E vis to 1¼ mile.

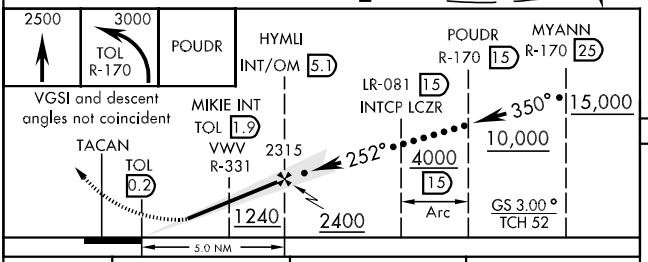
MALSR A5

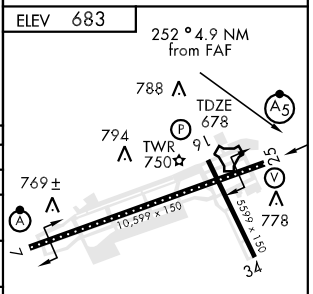
MISSED APPROACH: Climb to 2500 then climbing left turn to 3000 via TOL R-170 to POUDR (TOL R-170/15 DME) and hold.

ATIS	TOLEDO APP CON	TOLEDO TOWER	GND CON	CLNC DEL	ASR
118.75 271.3	126.1 317.55	118.1 285.4	121.9 348.6	121.75	



EMERG SAFE ALT 100 NM 4000





HIRL Rwy 7-25 726 ± ∧
MIRL Rwy 16-34
REIL Rwy 16 and 34 775 ± ∧
TDZL/CL Rwy 7

FAF to MAP 4.9 NM					
Knots	120	140	160	180	200
Min:Sec	2:27	2:06	1:50	1:38	1:28

CATEGORY	C	D	E
S-ILS 25*	878-½ 200 (200-½)		
S-LOC 25	1240-1 562 (600-1)	1240-1¼ 562 (600-1¼)	1240-1½ 562 (600-1½)
CIRCLING	1240-1½ 556 (600-1½)	1240-2 556 (600-2)	1400-2½ 716 (800-2½)
MIKIE INT MINIMUMS			
S-LOC 25**	1020-½ 342 (400-½)	1020-¾ 342 (400-¾)	
CIRCLING	1180-1½ 496 (500-1½)	1240-2 556 (600-2)	1400-2½ 716 (800-2½)
S-ASR 25	1040-½ 362 (400-½)	1040-1 362 (400-1)	

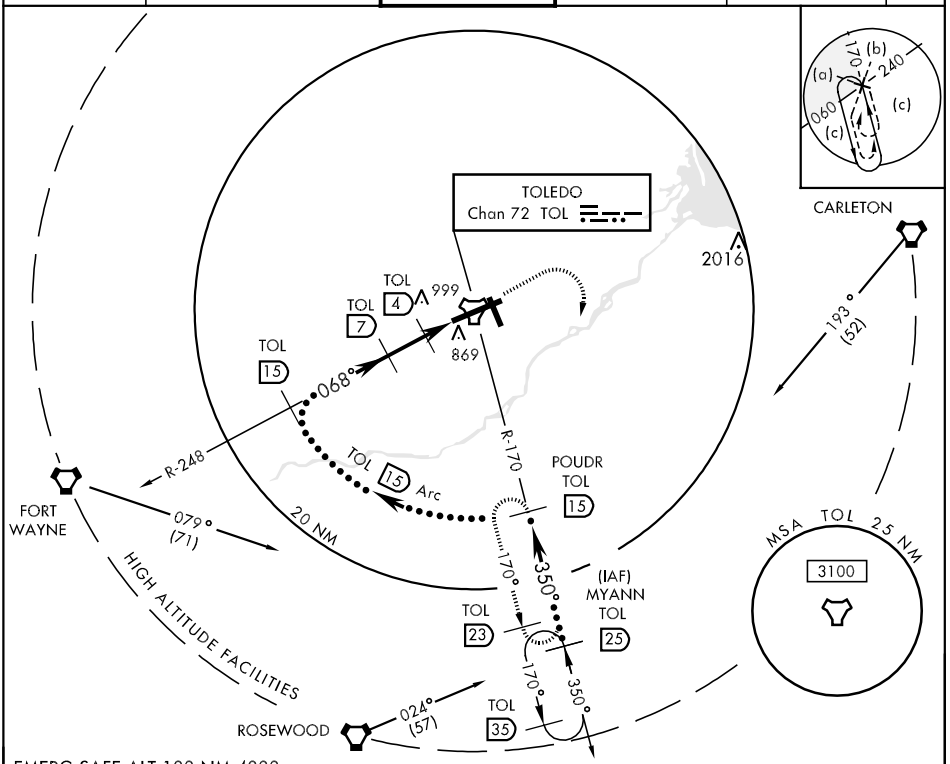
HI-TACAN RWY 7

TACAN TOL Chan 72	APCH CRS 068°	Rwy ldg 10,599 TDZE 683 Arpt Elev 683	JAL-184 [USAF]	TOLEDO EXPRESS (KTOL)

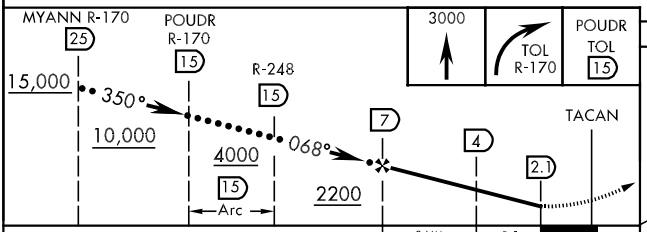
ALSF-2

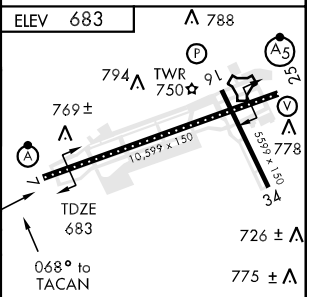
MISSED APPROACH: Climb to 3000 then right turn via TOL R-170 to POUDR and hold.

ATIS	TOLEDO APP CON	TOLEDO TOWER	GND CON	CLNC DEL	ASR
118.75 271.3	126.1 317.55	118.1 285.4	121.9 348.6	121.75	



EMERG SAFE ALT 100 NM 4000





CATEGORY	C	D	E
S-7	1060/24 377 (400-½)	1060/50 377 (400-1)	
CIRCLING	1180-1½ 496 (500-1½)	1240-2 556 (600-2)	1360-2½ 676 (700-2½)
S-ASR 7	1080/24 397 (400-½)	1080/50 397 (400-1)	

HIRL Rwy 7-25
MIRL Rwy 16-34
REIL Rwys 16 and 34
TDZL/CL Rwy 7

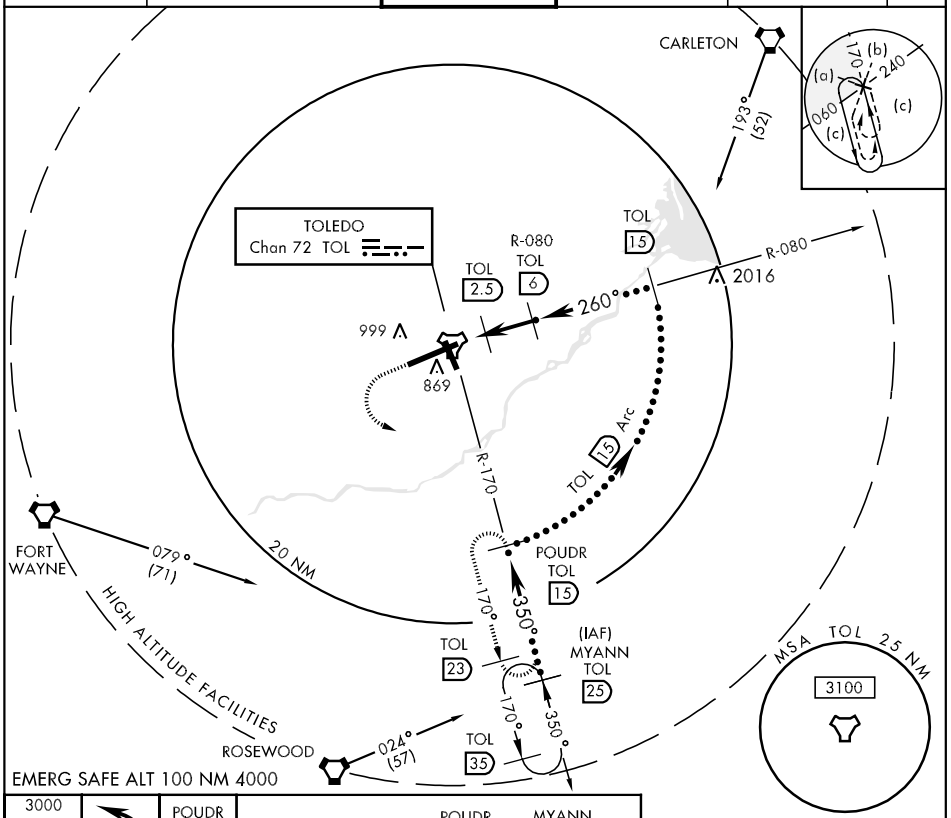
HI-TACAN RWY 25

TACAN TOL Chan 72	APCH CRS 260°	Rwy ldg 10,599 TDZE 678 Arpt Elev 683	JAL-184 [USAF]	TOLEDO EXPRESS (KTOL)

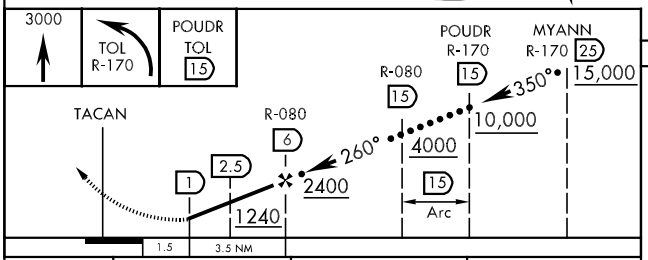
MALSR

MISSED APPROACH: Climb to 3000 then left turn via TOL R-170 to POUDR and hold.

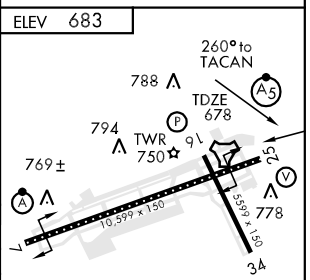
ATIS	TOLEDO APP CON	TOLEDO TOWER	GND CON	CLNC DEL	ASR
118.75 271.3	126.1 317.55	118.1 285.4	121.9 348.6	121.75	



EMERG SAFE ALT 100 NM 4000



ELEV 683



CATEGORY	C	D	E
S-25	1040-¾ 362 (400-¾)	1040-1 362 (400-1)	
CIRCLING	1180-1½ 496 (500-1½)	1240-2 556 (600-2)	1360-2½ 676 (700-2½)
S-ASR 25	1040-½ 362 (400-½)	1040-1 362 (400-1)	

HIRL Rwy 7-25 726 ± ∧
MIRL Rwy 16-34
REIL Rwy 16 and 34 775 ± ∧
TDZL/CL Rwy 7

LOC I-TOL	APP CRS	Rwy ldg	10599
109.7	072°	TDZE	683
		Apt Elev	683

ILS or LOC RWY 7
TOLEDO EXPRESS (TOL)

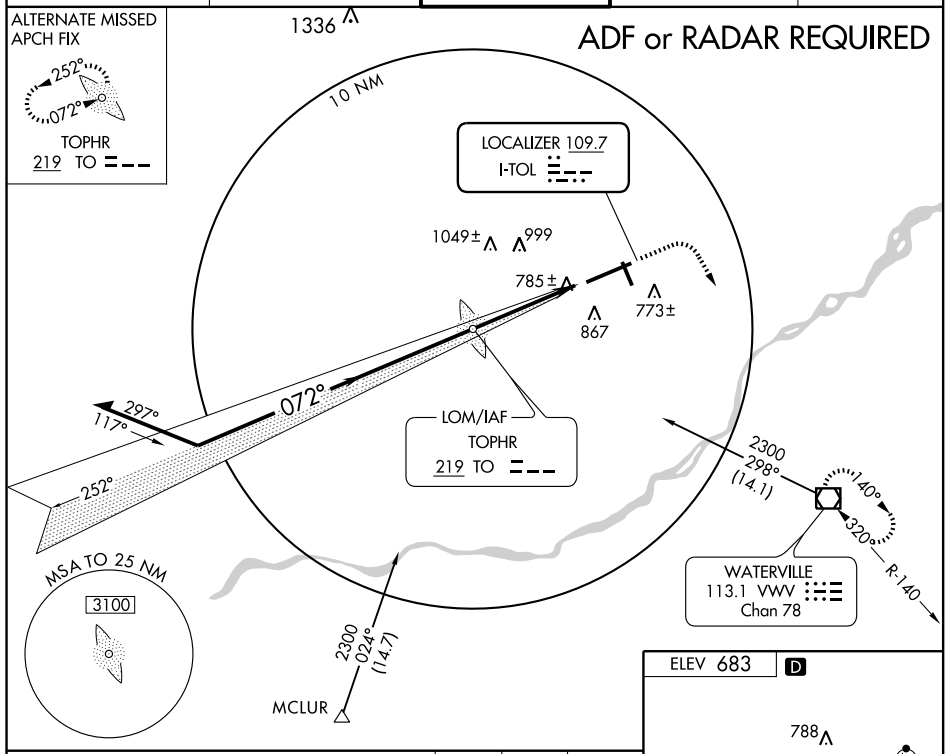
ASR

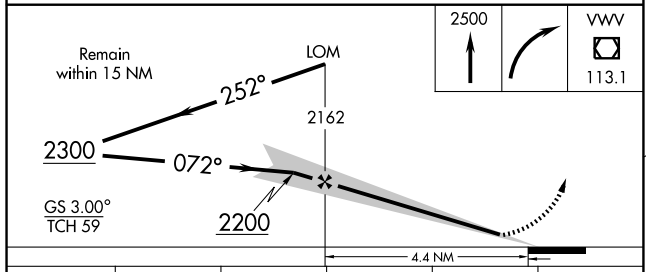
For inoperative ALSF, increase S-ILS 7 Cat E visibility to ¾ mile, S-LOC 7 Cat E visibility to 1½ mile.

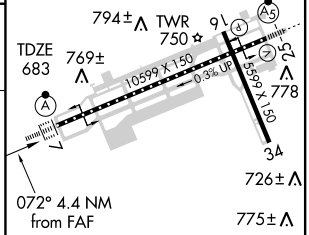
ALSF-2

MISSED APPROACH: Climb to 2500 then right turn direct VWV VOR/DME and hold.

ATIS	TOLEDO APP CON	TOLEDO TOWER	GND CON	CLNC DEL
118.75 271.3	134.35 317.55	118.1 285.4	121.9 348.6	121.75 348.6







TDZ/CL Rwy 7
HIRL Rwy 7-25
MIRL Rwy 16-34
REIL Rwys 16 and 34

CATEGORY	A	B	C	D	E
S-ILS 7	883/18 200 (200-½)				883/24 200 (200-½)
S-LOC 7	1080/24 397 (400-½)			1080/40 397 (400-¾)	1080/50 397 (400-1)
CIRCLING	1180-1 497 (500-1)		1180-1½ 497 (500-1½)	1240-2 557 (600-2)	1400-2½ 717 (800-2½)

FAF to MAP 4.4 NM

Knots	60	90	120	150	180
Min:Sec	4:24	2:56	2:12	1:46	1:28

EC-2, 14 JAN 2010 to 11 FEB 2010

LOC I-BQE	APP CRS	Rwy ldg	10599
108.7	252°	TDZE	678
		Apt Elev	684

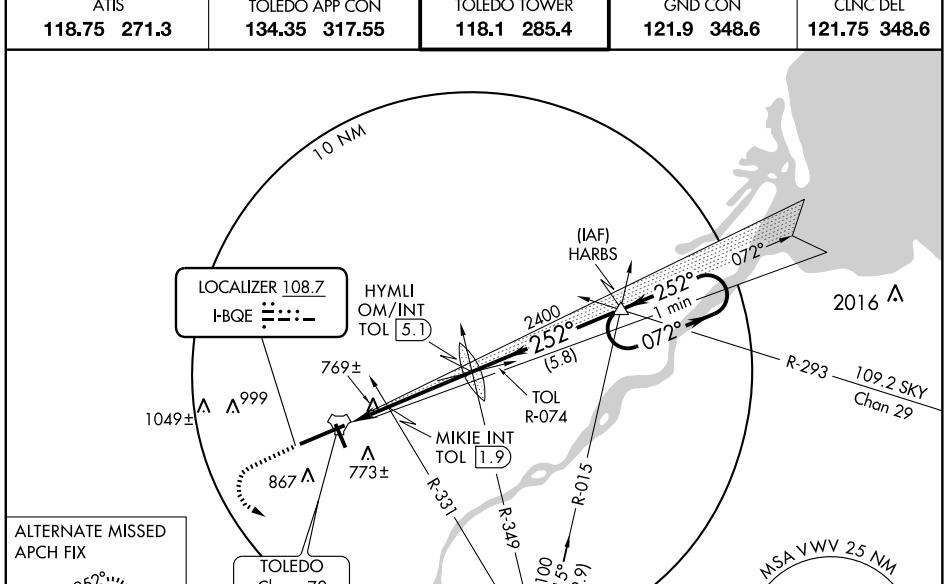
ILS or LOC RWY 25
TOLEDO EXPRESS (TOL)

ASR: If local altimeter setting not received, use Lambertville/Toledo Suburban altimeter setting and increase all DA's/MDA's 40 feet. When ALS inoperative, increase Cat E S-ILS 25 visibilty ¼ mile, S-LOC 25 ½ mile.

MALSR

MISSED APPROACH: Climb to 2500, then left turn direct VWV VOR/DME and hold.

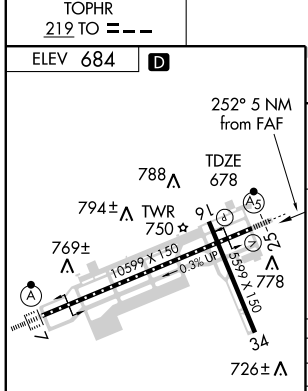
ATIS	TOLEDO APP CON	TOLEDO TOWER	GND CON	CLNC DEL
118.75 271.3	134.35 317.55	118.1 285.4	121.9 348.6	121.75 348.6



ALTERNATE MISSED APCH FIX

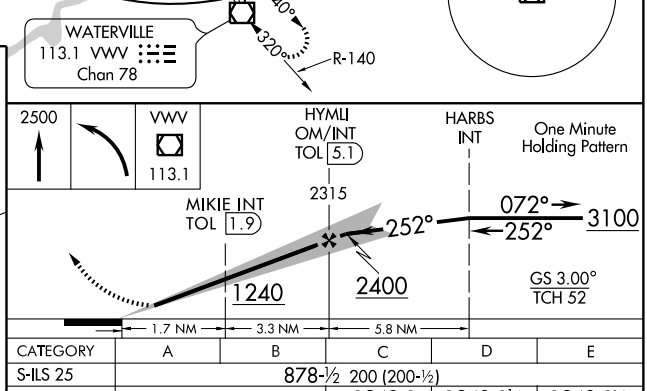
TOPHR
219 TO

ELEV 684 D



TDZ/CL Rwy 7
HIRL Rwy 7-25
MIRL Rwy 16-34
REIL Rwys 16 and 34

FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40



CATEGORY	A	B	C	D	E
S-ILS 25	878-½ 200 (200-½)				
S-LOC 25	1240-½ 562 (600-½)		1240-1 562 (600-1)	1240-1¼ 562 (600-1¼)	1240-1½ 562 (600-1½)
CIRCLING	1240-1 556 (600-1)		1240-1½ 556 (600-1½)	1240-2 556 (600-2)	1400-2½ 716 (800-2½)
MIKIE FIX MINIMUMS					
S-LOC 25	1060-½ 382 (400-½)			1060-¾ 382 (400-¾)	
CIRCLING	1180-1 496 (500-1)		1180-1½ 496 (500-1½)	1240-2 556 (600-2)	1400-2½ 716 (800-2½)

EC-2, 14 JAN 2010 to 11 FEB 2010

WAAS CH 99399 W07A	APP CRS 072°	Rwy ldg 10599 TDZE 683 Apt Elev 684

RNAV (GPS) RWY 7
TOLEDO EXPRESS (TOL)

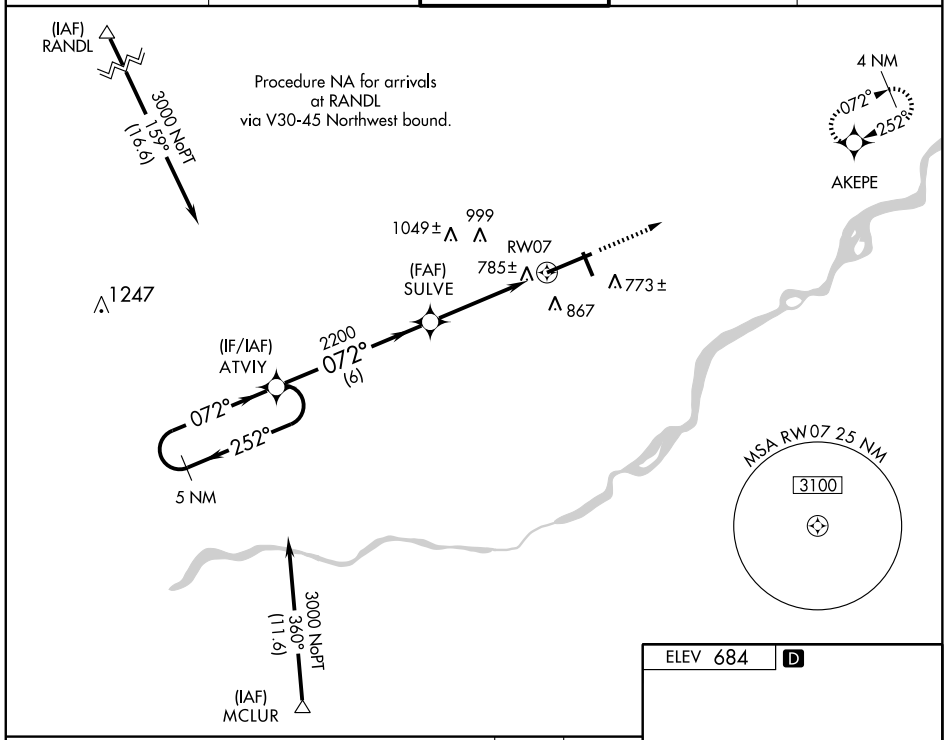
ASR

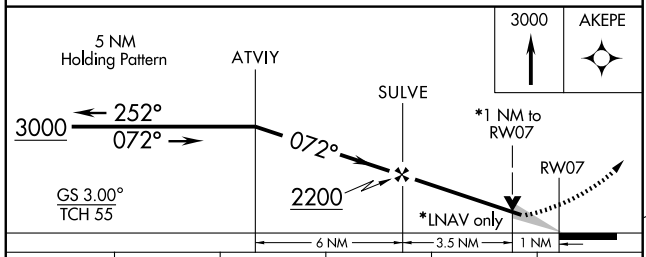
Baro-VNAV NA Below -16°C (4°F). DME/DME RNP-0.3 NA. If local altimeter setting not received, use Lambertville/Toledo Suburban altimeter setting and increase all DA's/MDA's 40 feet. VDP and Baro VNAV NA when using Lambertville/Toledo Suburban altimeter setting. For inoperative ALSF, increase LNAV Cat. D/E visibility to RVR 6000, increase LPV visibility to RVR 6000 all Cats.

ALSF-2

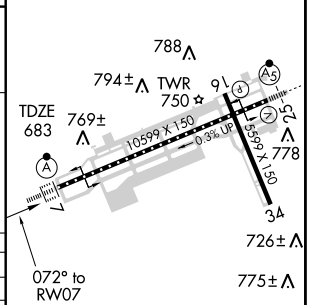
MISSED APPROACH: Climb to 3000 direct AKEPE and hold.

ATIS	TOLEDO APP CON	TOLEDO TOWER	GND CON	CLNC DEL
118.75 271.3	134.35 317.55	118.1 285.4	121.9 348.6	121.75 348.6





CATEGORY	A	B	C	D	E
LPV DA	1018/40 335 (400-¾)				
LNAV/VNAV DA	1086/50 403 (500-1)				
LNAV MDA	1040/24 357 (400-½)			1040/50 357 (400-1)	
CIRCLING	1180-1½ 496 (500-1½)			1240-2 556 (600-2)	1400-2½ 716 (800-2½)



TDZ/CL Rwy 7
HIRL Rwy 7-25
MIRL Rwy 16-34
REIL Rwys 16 and 34

EC-2, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	5599
162°	TDZE	674
	Apt Elev	684

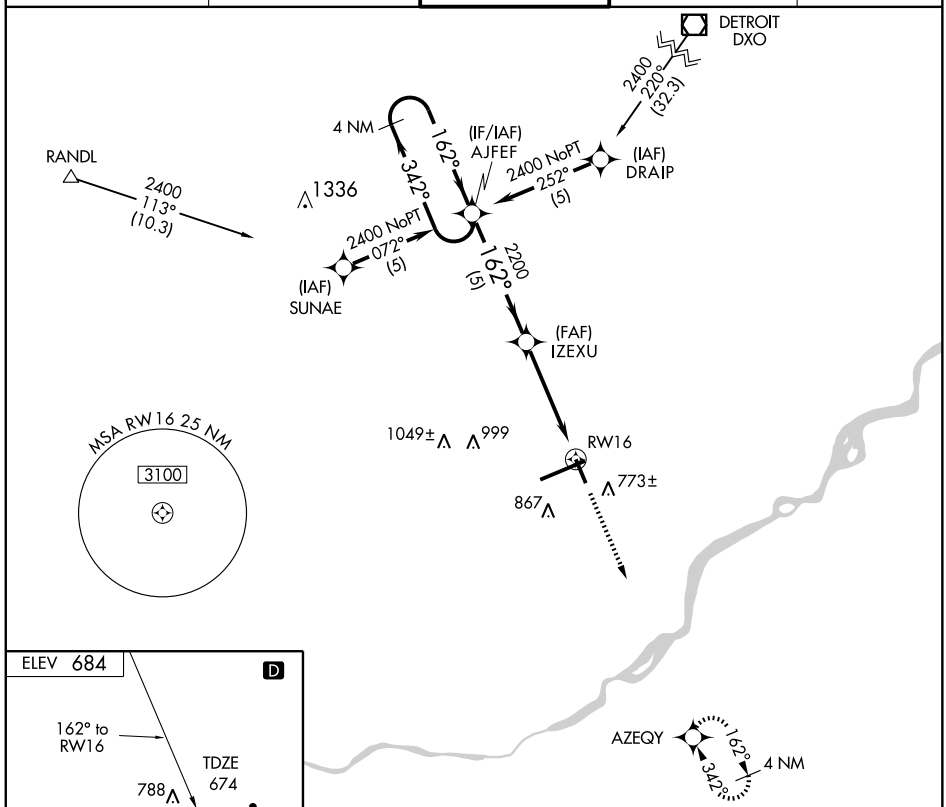
RNAV (GPS) RWY 16
TOLEDO EXPRESS (TOL)

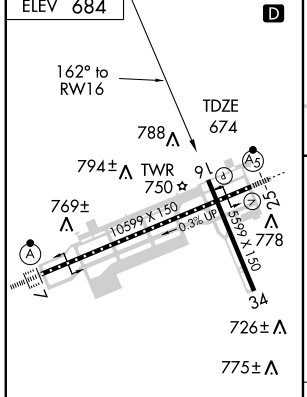
NA
ASR

GPS or RNP-0.3 required.
DME/DME RNP-0.3 NA.

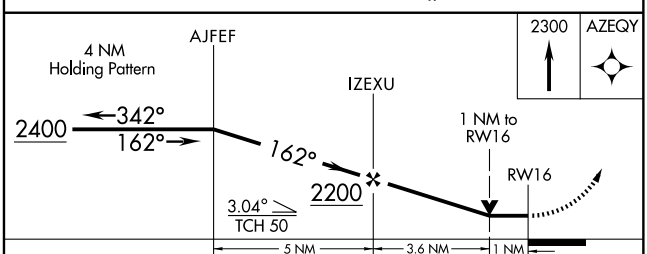
MISSED APPROACH: Climb to 2300 direct AZEQY WP and hold.

ATIS	TOLEDO APP CON	TOLEDO TOWER	GND CON	CLNC DEL
118.75 271.3	134.35 317.55	118.1 285.4	121.9 348.6	121.75 348.6





TDZ/CL Rwy 7
HIRL Rwy 7-25
MIRL Rwy 16-34
REIL Rwys 16 and 34



CATEGORY	A	B	C	D	E
LNAV MDA	1040-1 366 (400-1)			1040-1¼ 366 (400-1¼)	NA
CIRCLING	1180-1 496 (500-1)		1180-1½ 496 (500-1½)	1240-2 556 (600-2)	NA

EC-2, 14 JAN 2010 to 11 FEB 2010

WAAS CH 48899 W25A	APP CRS 252°	Rwy ldg 10599 TDZE 678 Apt Elev 683

RNAV (GPS) RWY 25
TOLEDO EXPRESS (TOL)

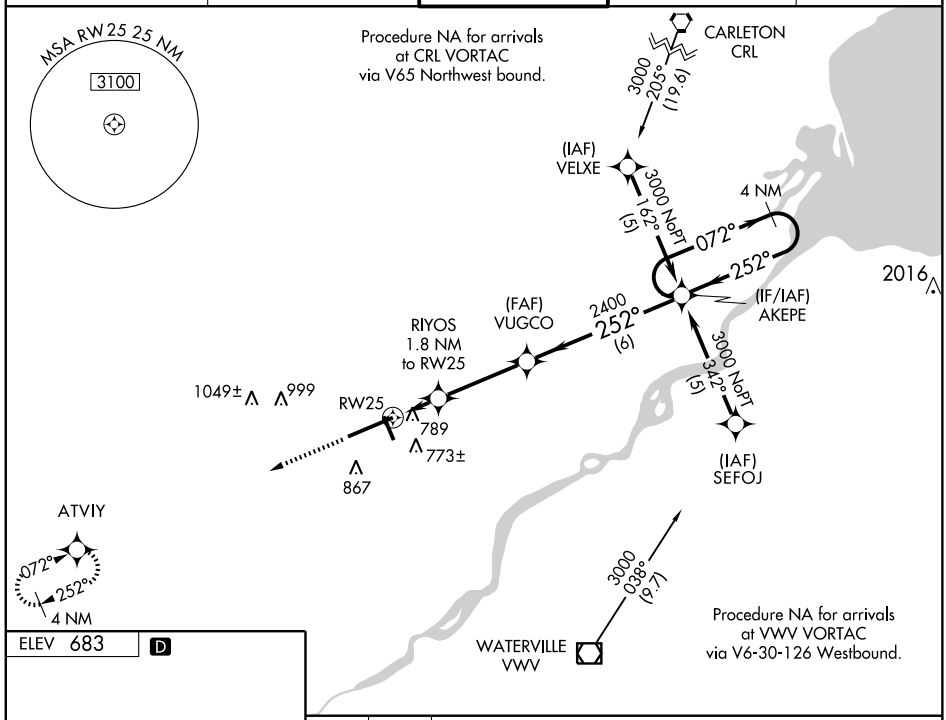
For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 47°C (116°F). DME/DME RNP-0.3 NA. For inoperative MALSR, increase LPV Cat E visibility to ¾ mile, LNAV/VNAV Cat E visibility to 1½ mile, LNAV Cat D/E visibility to 1¼ mile.

ASR

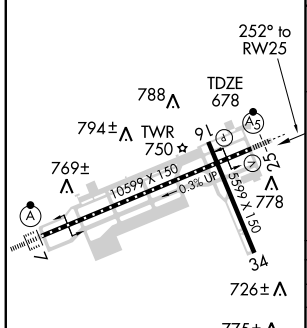
MALSR

MISSED APPROACH: Climb to 3000 direct ATVIY and hold.

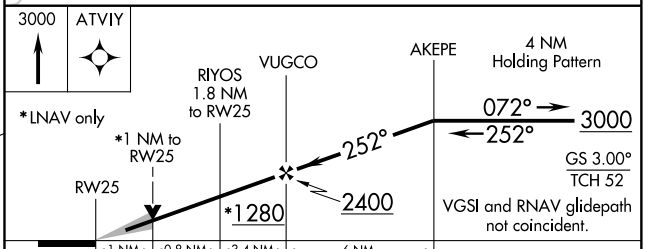
ATIS	TOLEDO APP CON	TOLEDO TOWER	GND CON	CLNC DEL
118.75 271.3	134.35 317.55	118.1 285.4	121.9 348.6	121.75 348.6



ELEV 683 D



TDZ/CL Rwy 7
HIRL Rwy 7-25
MIRL Rwy 16-34
REIL Rwys 16 and 34



CATEGORY	A	B	C	D	E
LPV DA	878-½ 200 (200-½)				
LNAV/VNAV DA	1065-1 387 (400-1)				
LNAV MDA	1040-½ 362 (400-½)			1040-1 362 (400-1)	
CIRCLING	1180-1 497 (500-1)		1180-1½ 497 (500-1½)	1240-2 557 (600-2)	1400-2½ 717 (800-2½)

APP CRS	Rwy ldg	5599
342°	TDZE	668
	Apt Elev	684

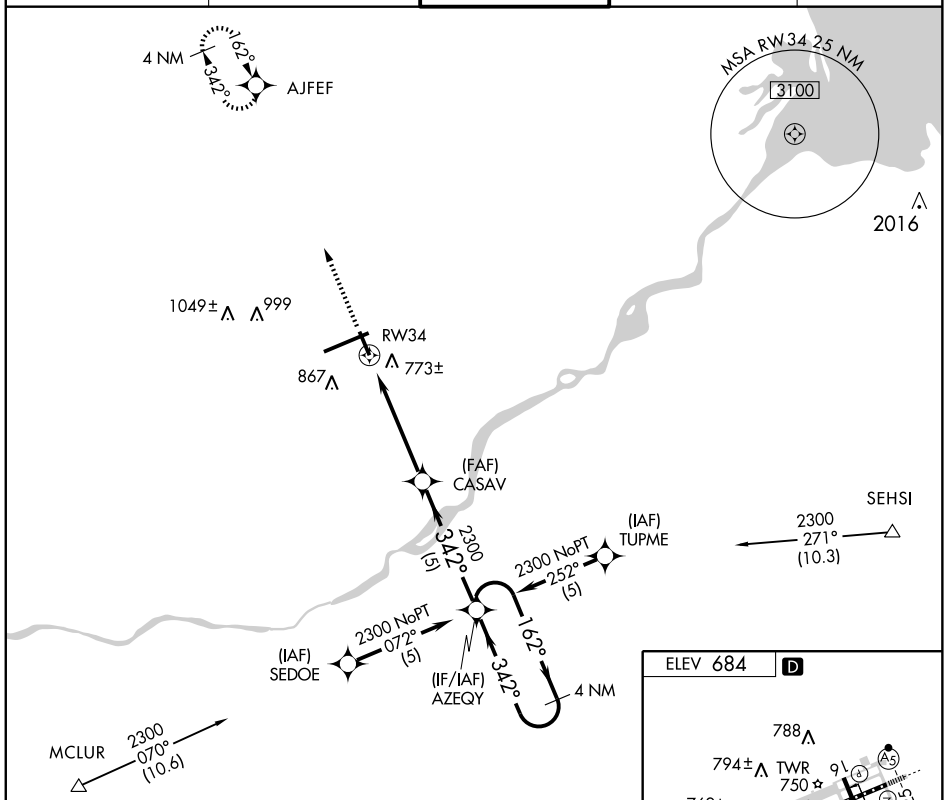
RNAV (GPS) RWY 34
TOLEDO EXPRESS (TOL)

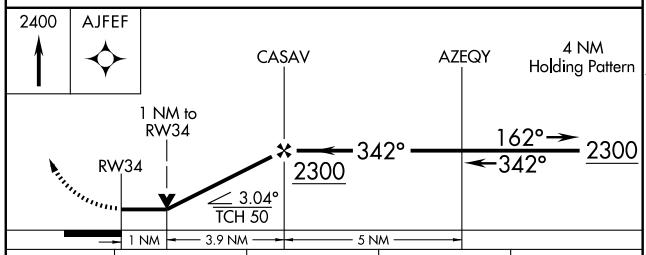
T
A NA
ASR

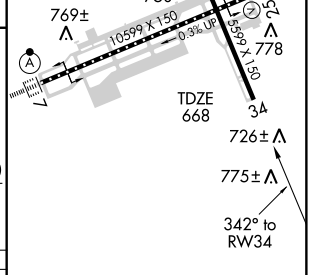
GPS or RNP-0.3 required.
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 2400 direct AJFEF WP and hold.

ATIS	TOLEDO APP CON	TOLEDO TOWER	GND CON	CLNC DEL
118.75 271.3	134.35 317.55	118.1 285.4	121.9 348.6	121.75 348.6







CATEGORY	A	B	C	D
LNAV MDA	1040-1 372 (400-1)			1040-1¼ 372 (400-1¼)
CIRCLING	1180-1 496 (500-1)		1180-1½ 496 (500-1½)	1240-2 556 (600-2)

TDZ/CL Rwy 7
HIRL Rwy 7-25
MIRL Rwy 16-34
REIL Rwys 16 and 34

EC-2, 14 JAN 2010 to 11 FEB 2010

VOR/DME VWV 113.1 Chan 78	APP CRS 319°	Rwy ldg 5599 TDZE 668 Apt Elev 684

VOR/DME RWY 34

TOLEDO EXPRESS (TOL)

ASR

MISSED APPROACH: Climb to 2500, then left turn direct VWV VOR/DME and hold.

ATIS	TOLEDO APP CON	TOLEDO TOWER	GND CON	CLNC DEL
118.75 271.3	134.35 317.55	118.1 285.4	121.9 348.6	121.75 348.6

2016

1049± 999 867 773± SIBLE VWV 5.2 2300 319° (5.2) 139° 319° 094° 274° R-139 10 NM

NoPT for arrivals on VWV VOR/DME airway radials 086 CW 192.

IAF WATERVILLE 113.1 VWV Chan 78

MSA VWV 25 NM 3100

ELEV 684 D

788 794± TWR 750 769± 10599 X 150 0.3% UP 5599 X 150 778 TDZE 668 726± 775± 319° 5.2 NM from FAF

TDZ/CL Rwy 7
HIRL Rwy 7-25
MIRL Rwy 16-34
REIL Rwys 16 and 34

2500 VWV 113.1 SIBLE VWV 5.2 VOR/DME Remain within 10 NM 139° 319° 319° 2300 VWV 9.9 2300 2.87° TCH 50 VGSI and descent angles not coincident. 0.5 4.7 NM 5.2 NM

CATEGORY	A	B	C	D
S-34	1080-1 412 (400-1)		1080-1¼ 412 (400-1¼)	
CIRCLING	1180-1 496 (500-1)		1180-1½ 496 (500-1½)	1240-2 556 (600-2)

EC-2. 14 JAN 2010 to 11 FEB 2010

VORTAC FDY 108.2 Chan 19	APP CRS 104°	Rwy ldg N/A TDZE N/A Apt Elev 830

VOR or GPS-A

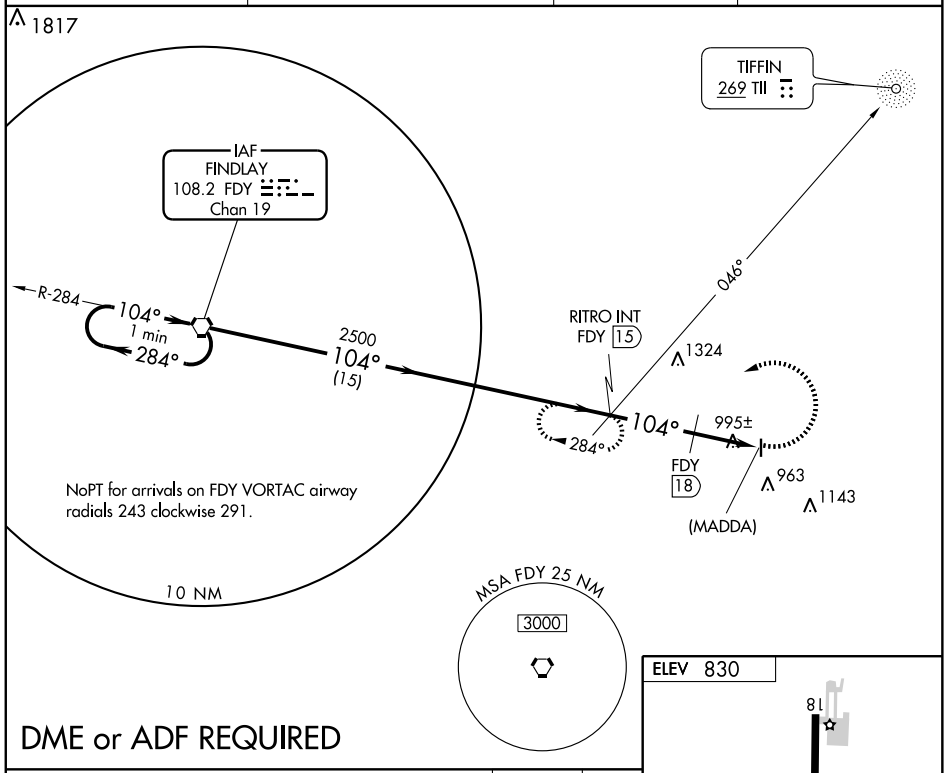
UPPER SANDUSKY / WYANDOT COUNTY (56D)

NA

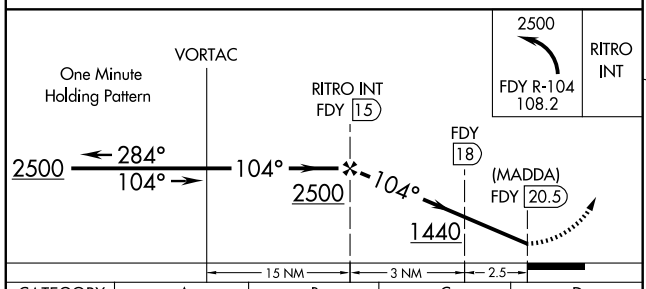
Use Findlay altimeter setting.

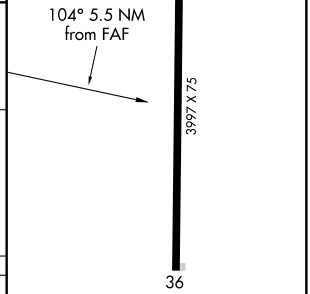
MISSED APPROACH: Climbing left turn to 2500 via FDY R-104 to RITRO Int/15 DME and hold.

FINDLAY ASOS	MANSFIELD APP CON ★	CTAF	
124.425	124.2 390.8	122.9	123.05 L



DME or ADF REQUIRED





MIRL Rwy 18-36 L

CATEGORY	A	B	C	D
CIRCLING	1440-1 610 (700-1)	1440-1¼ 610 (700-1¼)	1440-1¾ 610 (700-1¾)	1440-2 610 (700-2)
DME MINIMUMS				
CIRCLING	1340-1 510 (600-1)	1340-1¼ 510 (600-1¼)	1340-1½ 510 (600-1½)	1380-2 550 (600-2)

FAF to MAP 5.5 NM

Knots	60	90	120	150	180
Min:Sec	5:30	3:40	2:45	2:12	1:50

EC-2, 14 JAN 2010 to 11 FEB 2010

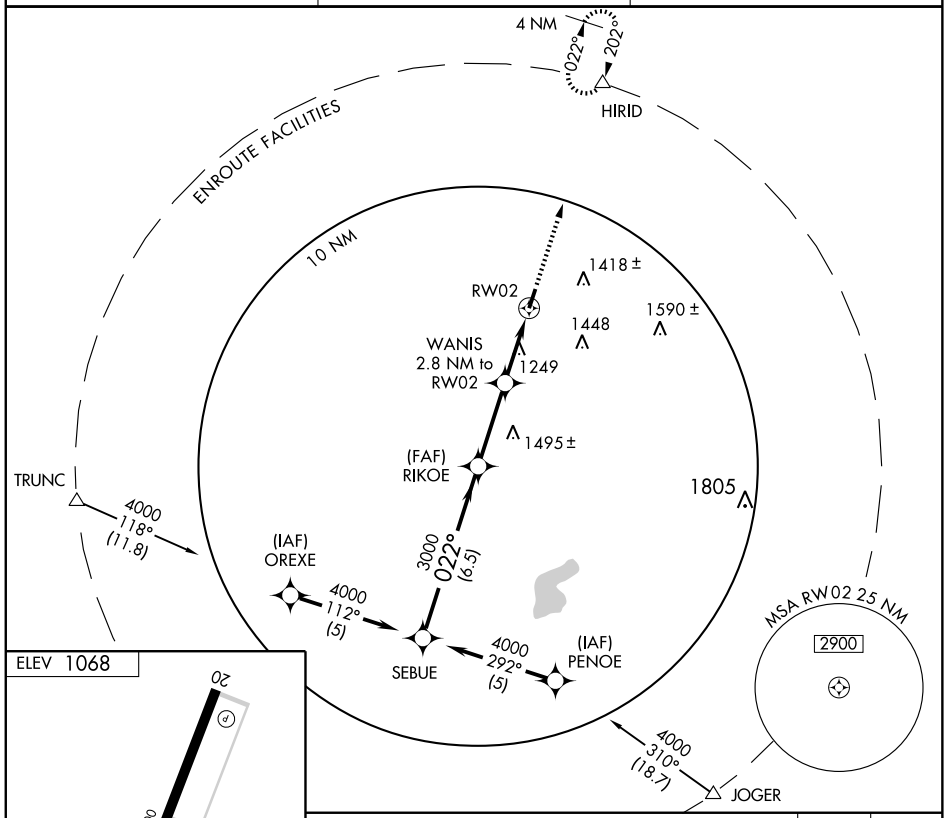
APP CRS	Rwy ldg	4400
022°	TDZE	1068
	Apt Elev	1068

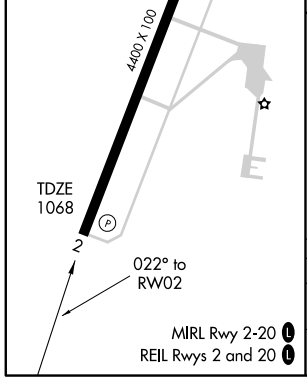
RNAV (GPS) RWY 2
URBANA / GRIMES FIELD (I74)

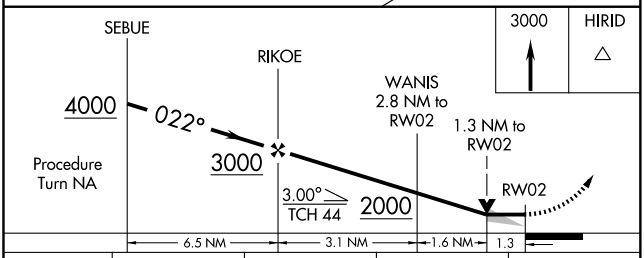
DME/DME RNP-0.3 NA.

MISSED APPROACH: Climb to 3000 direct HIRID WP and hold.

AWOS-3	DAYTON APP CON	UNICOM
118.325	118.425 294.5	122.7 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	1500 - 1 432 (500-1)		1500 - 1¼ 432 (500-1¼)	NA
CIRCLING	1580 - 1 512 (600-1)		1580 - 1½ 512 (600-1½)	NA

APP CRS	Rwy ldg	4400
202°	TDZE	1068
	Apt Elev	1068

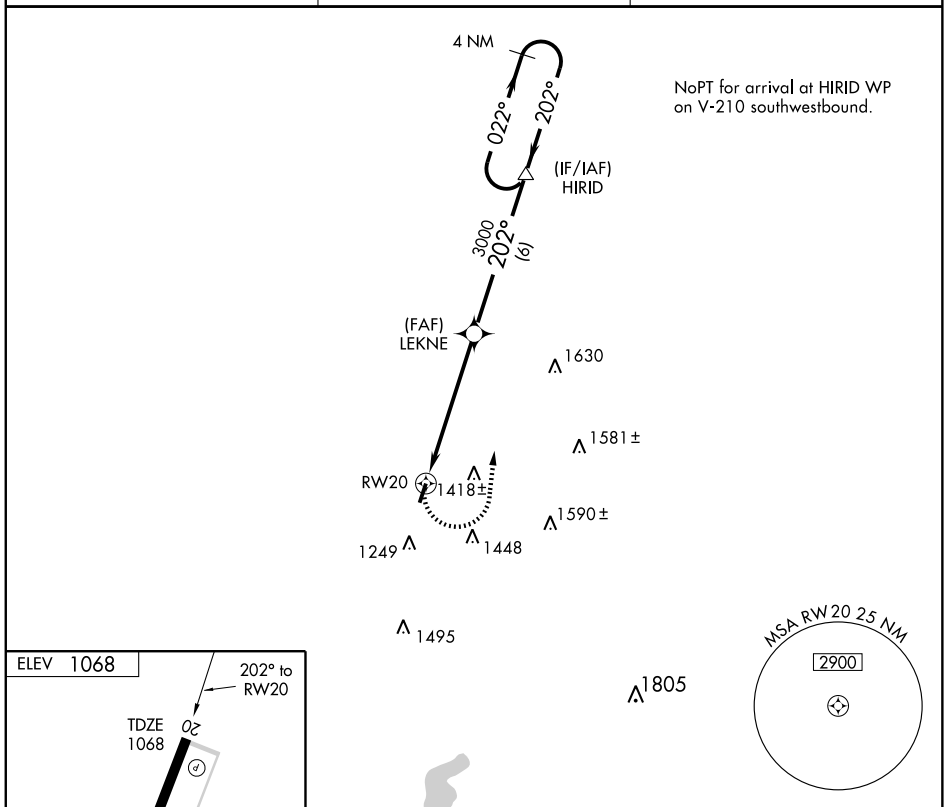
RNAV (GPS) RWY 20

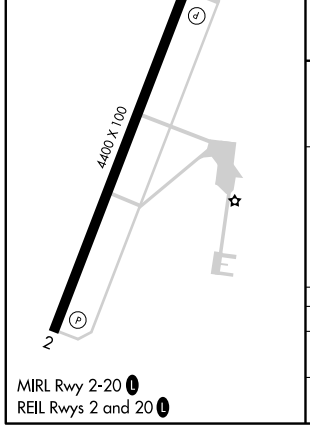
URBANA / GRIMES FIELD (I74)

DME/DME RNP-0.3 NA.

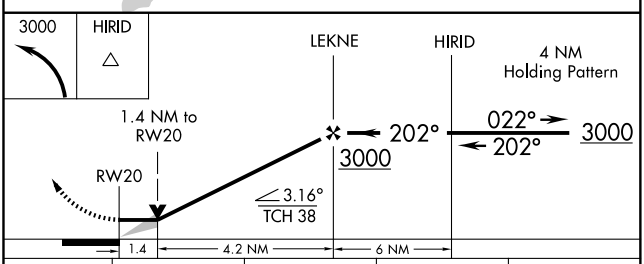
MISSED APPROACH: Climbing left turn to 3000 direct HIRID WP and hold.

AWOS-3	DAYTON APP CON	UNICOM
118.325	118.425 294.5	122.7 (CTAF) L





MIRL Rwy 2-20 L
REIL Rwys 2 and 20 L



CATEGORY	A	B	C	D
LNAV MDA	1560 - 1 492 (500-1)		1560 - 1¼ 492 (500-1¼)	NA
CIRCLING	1580 - 1 512 (600-1)		1580 - 1½ 512 (600-1½)	NA

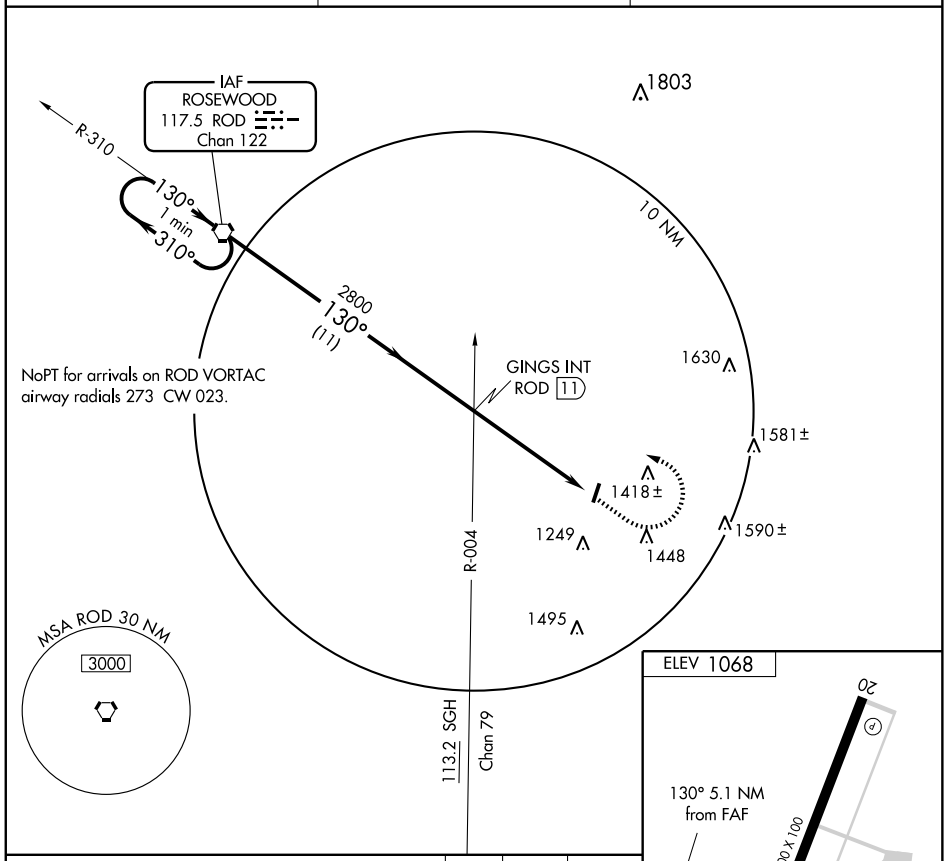
VORTAC ROD	APP CRS	Rwy Idg	N/A
117.5	130°	TDZE	N/A
Chan 122		Apt Elev	1068

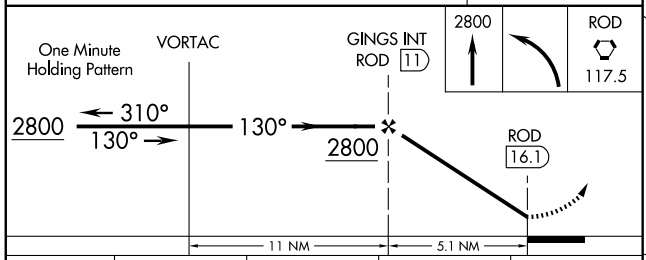
VOR-A

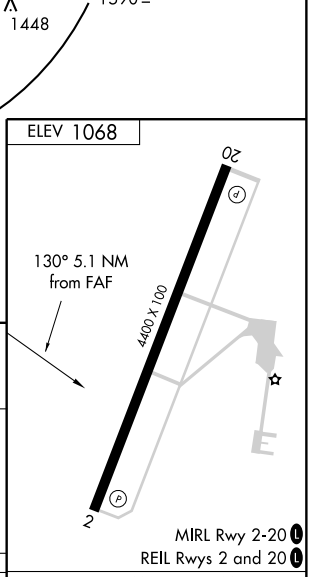
URBANA / GRIMES FIELD (I74)

MISSED APPROACH: Climb to 2800 then left turn direct ROD VORTAC and hold.

AWOS-3	DAYTON APP CON	UNICOM
118.325	118.425 294.5	122.7 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	1580-1 512 (600-1)		1580-1½ 512 (600-1½)	NA

FAF to MAP 5.1 NM

Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

EC-2, 14 JAN 2010 to 11 FEB 2010

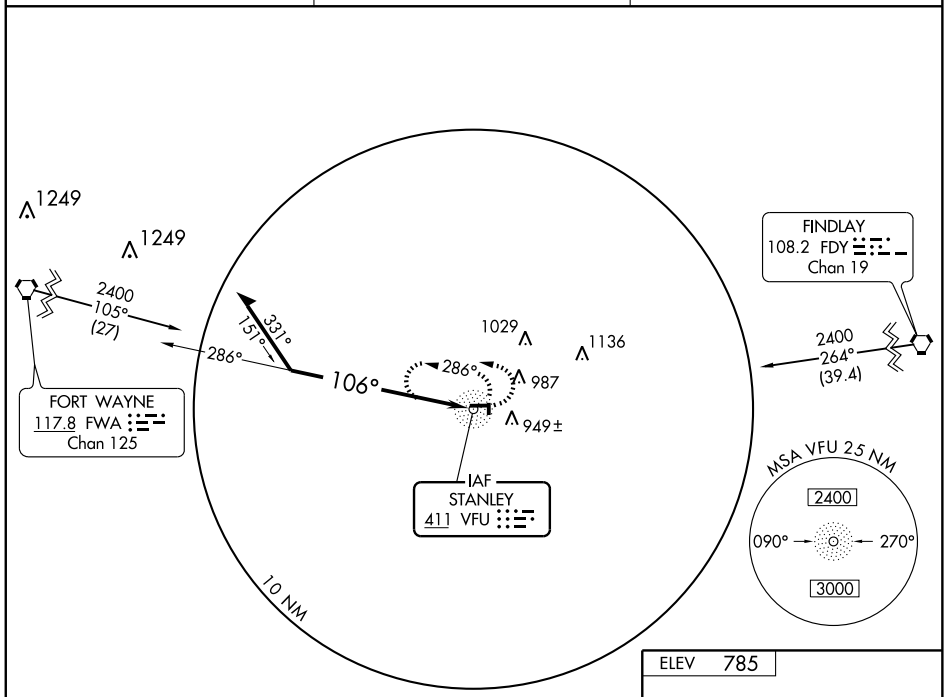
NDB VFU	APP CRS	Rwy ldg	4000
411	106°	TDZE	784
		Apt Elev	785

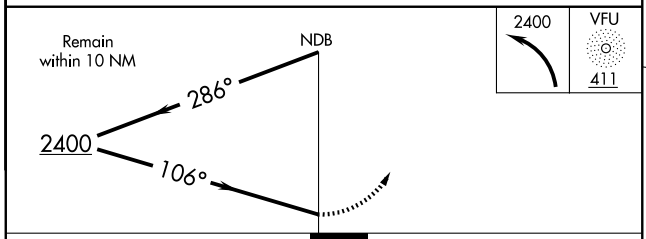
NDB RWY 9
VAN WERT COUNTY (VNW)

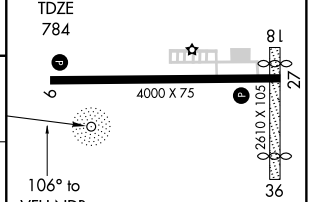
When local altimeter setting not received, use Fort Wayne altimeter setting and increase all MDA 80 feet and increase Cat C and D visibility ¼ mile.

MISSED APPROACH: Climbing left turn to 2400 in VFU NDB holding pattern.

AWOS-3	FORT WAYNE APP CON	UNICOM
125.175	127.2 284.6	123.0 (CTAF) L







CATEGORY	A	B	C	D
S-9	1420-1	636 (700-1)	1420-1¾ 636 (700-1¾)	1420-2 636 (700-2)
CIRCLING	1420-1	635 (700-1)	1420-1¾ 635 (700-1¾)	1420-2 635 (700-2)

MIRL Rwy 9-27 L
REIL Rwys 9 and 27 L

EC-2, 14 JAN 2010 to 11 FEB 2010

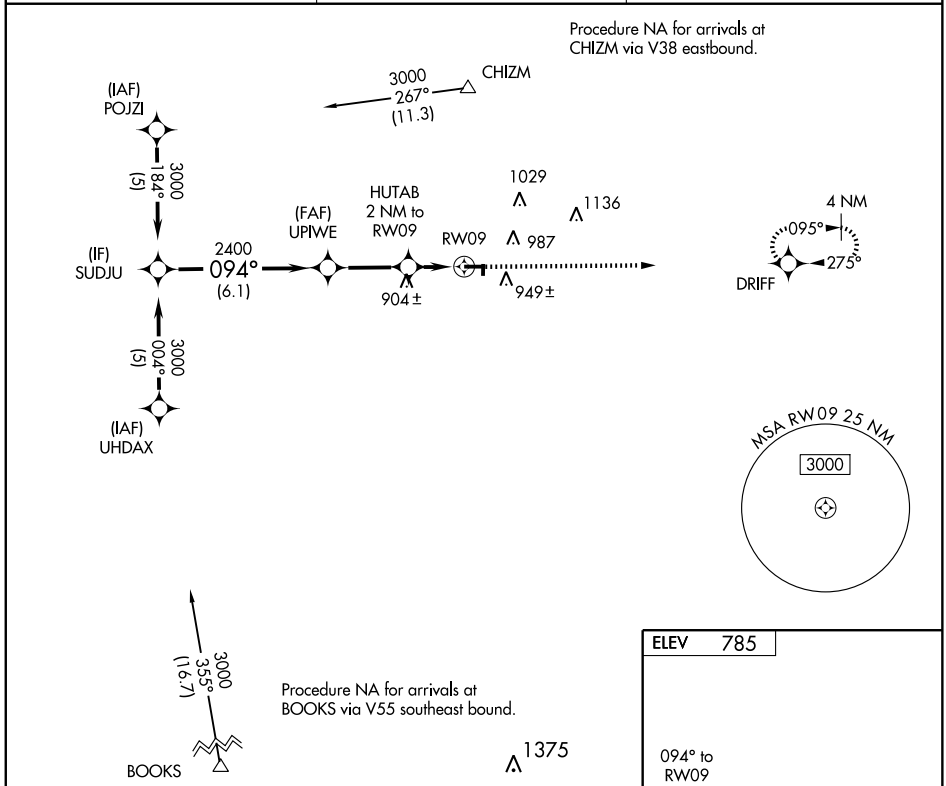
APP CRS	Rwy ldg	4000
094°	TDZE	784
	Apt Elev	785

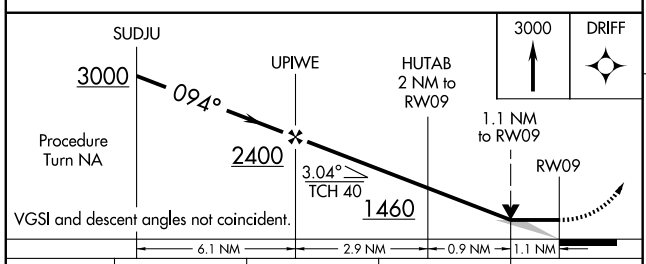
RNAV (GPS) RWY 9
VAN WERT COUNTY (VNW)

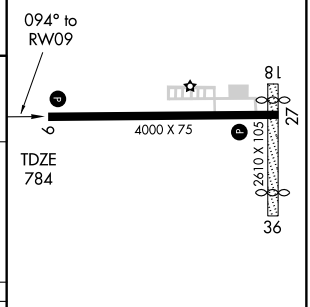
DME/DME RNP-0.3 NA. When local altimeter setting not received, use Fort Wayne altimeter setting and increase all MDA 80 feet and increase LNAV Cat C and D visibility ¼ mile and Circling Cat C visibility ¼ mile. VDP NA when using Fort Wayne altimeter setting.

MISSED APPROACH: Climb to 3000 direct DRIFF and hold.

AWOS-3	FORT WAYNE APP CON	UNICOM
125.175	127.2 284.6	123.0 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	1160-1 376 (400-1)			1160-1¼ 376 (400-1¼)
CIRCLING	1340-1 555 (600-1)		1340-1½ 555 (600-1½)	1340-2 555 (600-2)

MIRL Rwy 9-27 L
REIL Rwys 9 and 27 L

EC-2, 14 JAN 2010 to 11 FEB 2010

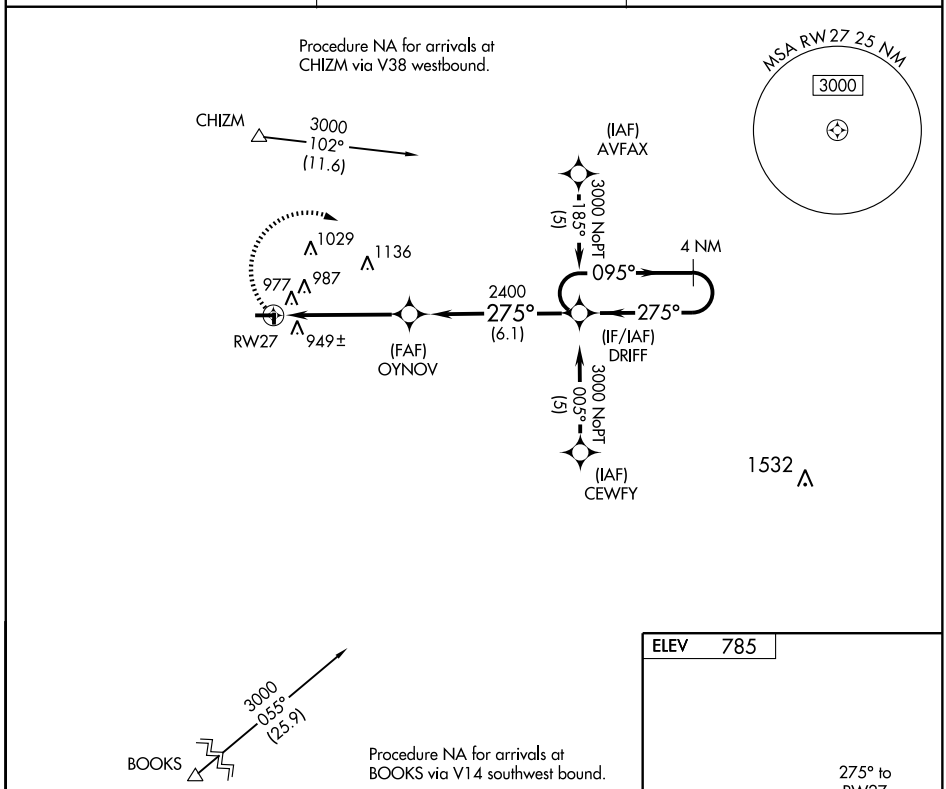
APP CRS	Rwy ldg	4000
275°	TDZE	785
	Apt Elev	785

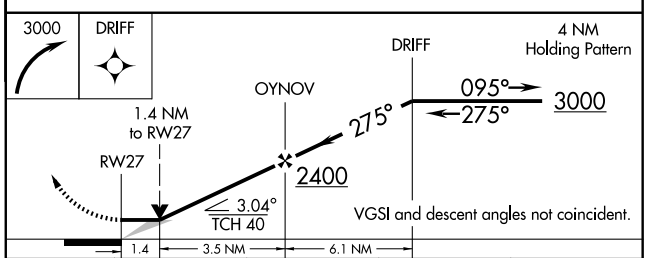
RNAV (GPS) RWY 27
VAN WERT COUNTY (VNW)

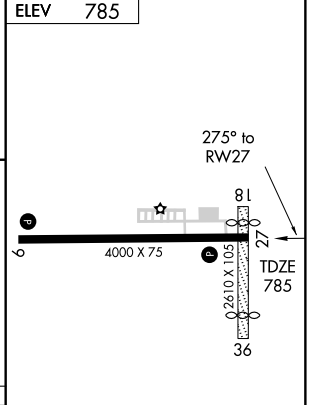
DME/DME RNP-0.3 NA. When local altimeter setting not received, use Fort Wayne altimeter setting and increase all MDA 80 feet and increase LNAV Cat C and D visibility ¼ mile and Circling Cat C visibility ¼ mile. VDP NA when using Fort Wayne altimeter setting.

MISSED APPROACH: Climbing right turn to 3000 direct DRIFF and hold.

AWOS-3	FORT WAYNE APP CON	UNICOM
125.175	127.2 284.6	123.0 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	1280-1 495 (500-1)		1280-1¼ 495 (500-1¼)	1280-1½ 495 (500-1½)
CIRCLING	1340-1 555 (600-1)		1340-1½ 555 (600-1½)	1340-2 555 (600-2)

MIRL Rwy 9-27 L
REIL Rwys 9 and 27 L

APP CRS	Rwy ldg	4512
092°	TDZE	1007
	Apt Elev	1007

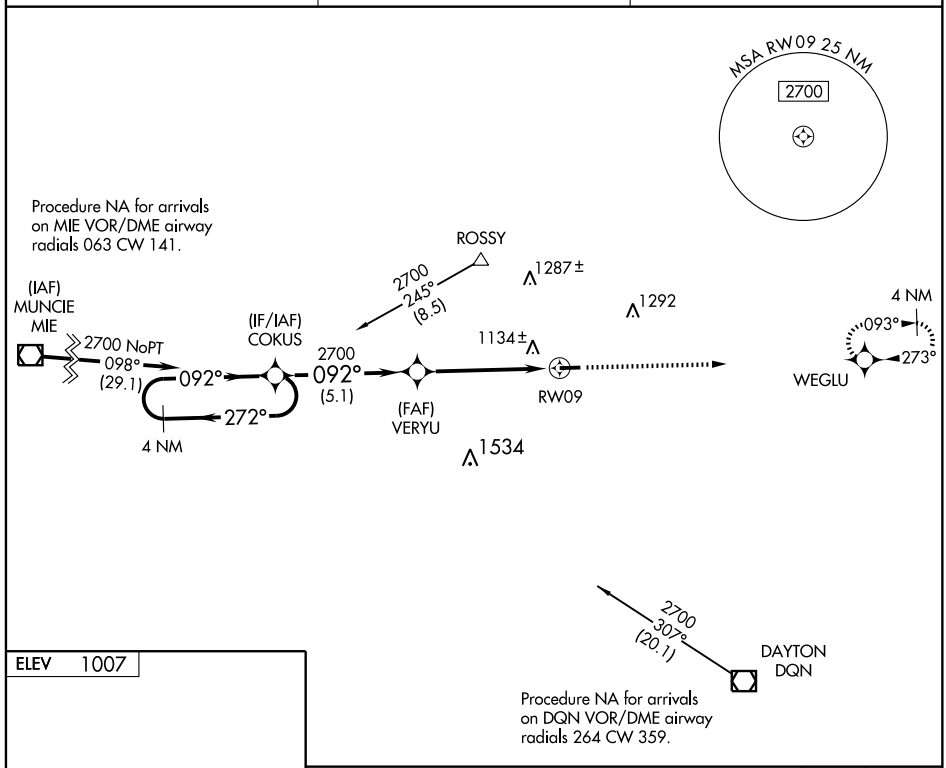
RNAV (GPS) RWY 9
VERSAILLES/ DARKE COUNTY (VES)

NA

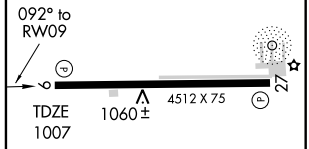
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Obtain local altimeter setting on CTAF; when not received, use James M. Cox Dayton Intl altimeter setting.

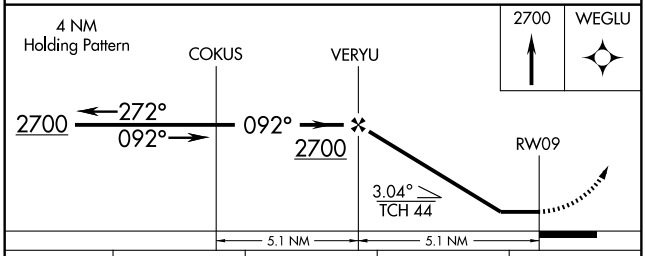
MISSED APPROACH: Climb to 2700 direct WEGLU and hold.

AWOS-3	DAYTON APP CON	UNICOM
123.75	134.45 352.05	122.8 (CTAF) L



ELEV 1007





CATEGORY	A	B	C	D
LNAV MDA	1400-1 393 (400-1)		NA	
CIRCLING	1440-1 433 (500-1)	1460-1 453 (500-1)	NA	
JAMES M. COX DAYTON INTL ALTIMETER SETTING MINIMUMS				
LNAV MDA	1440-1 433 (500-1)		NA	
CIRCLING	1500-1 493 (500-1)		NA	

REIL Rwys 9 and 27 L
MIRL Rwy 9-27 L

EC-2. 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	4512
273°	TDZE	1007
	Apt Elev	1007

RNAV (GPS) RWY 27

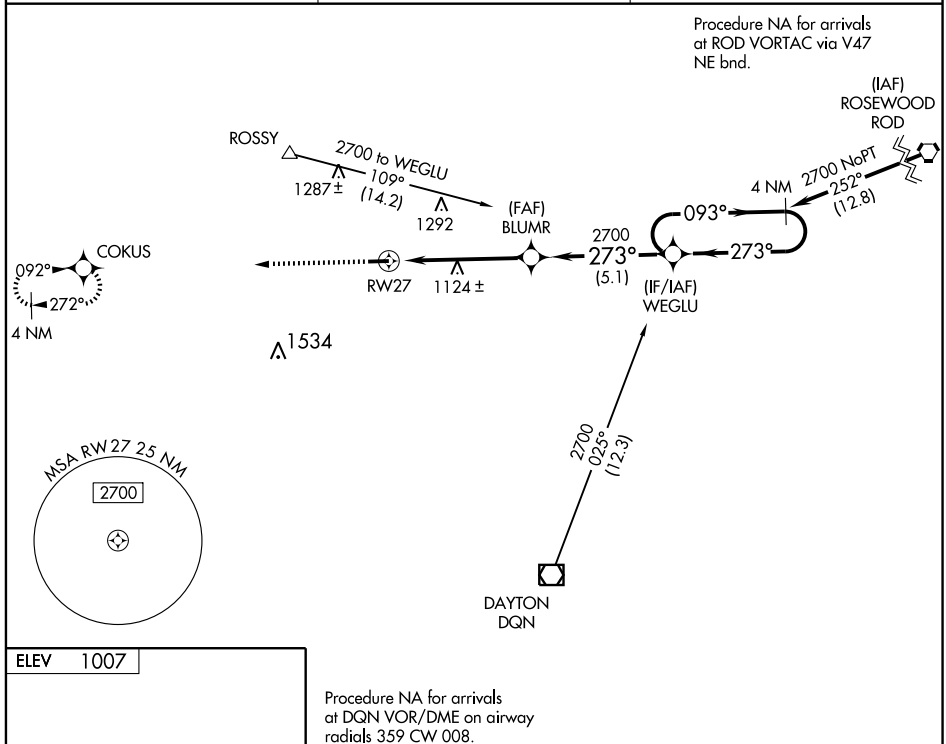
VERSAILLES/ DARKE COUNTY (VES)

NA

DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Obtain local altimeter setting on CTAF; when not received, use James M. Cox Dayton Intl altimeter setting.

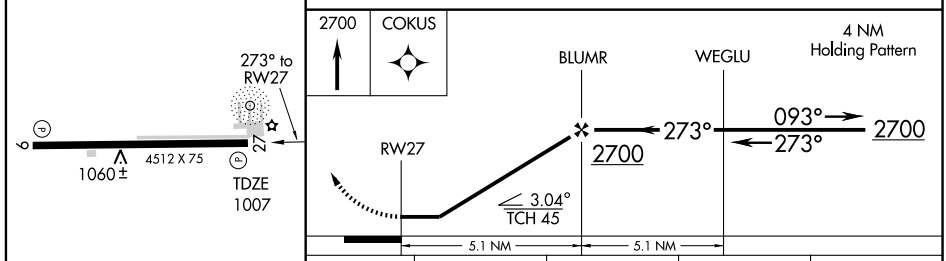
MISSED APPROACH: Climb to 2700 direct COKUS and hold.

AWOS-3	DAYTON APP CON	UNICOM
123.75	134.45 352.05	122.8 (CTAF) L



ELEV 1007

Procedure NA for arrivals at DQN VOR/DME on airway radials 359 CW 008.



CATEGORY	A	B	C	D
LNAV MDA	1380-1 373 (400-1)		NA	
CIRCLING	1440-1 433 (500-1)	1460-1 453 (500-1)	NA	
JAMES M. COX DAYTON INTL ALTIMETER SETTING MINIMUMS				
LNAV MDA	1440-1 433 (500-1)		NA	
CIRCLING	1500-1 493 (500-1)		NA	

REIL Rwys 9 and 27 L
MIRL Rwy 9-27 L

EC-2. 14 JAN 2010 to 11 FEB 2010

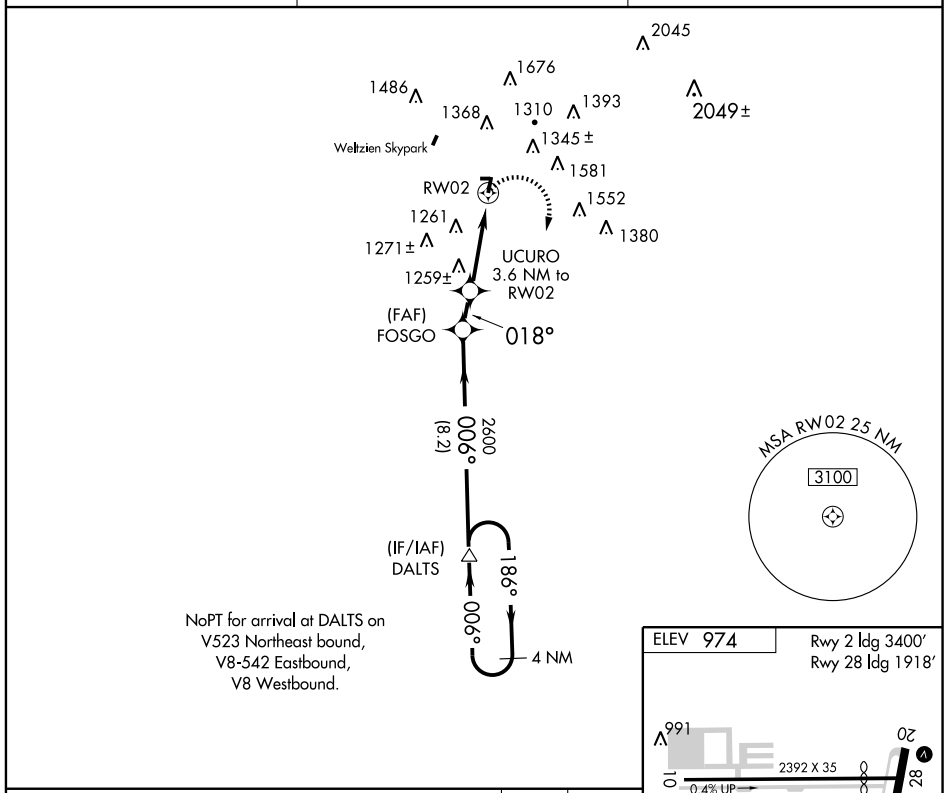
APP CRS	Rwy ldg	3400
018°	TDZE	972
	Apt Elev	974

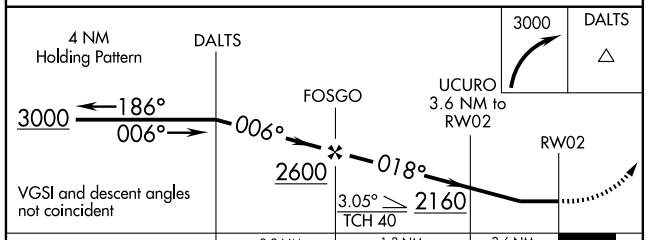
RNAV (GPS) RWY 2
WADSWORTH MUNI (3G3)

Use Wayne County altimeter setting; when not received, use Akron-Canton altimeter setting and increase all MDAs 20 feet.
NA DME/DME RNP-0.3 NA. Circling NA west of Rwy 2-20. When VGSI INOP, procedure NA at night. Visibility reduction by helicopters NA.

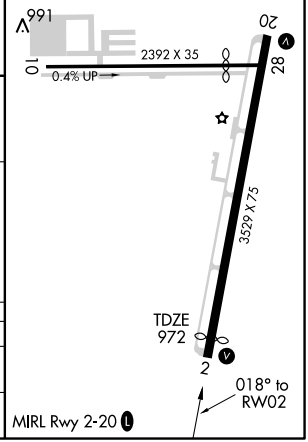
MISSED APPROACH: Climbing right turn to 3000 direct DALTS and hold.

WAYNE COUNTY ASOS	AKRON-CANTON APP CON ★	UNICOM
118.075	118.6 371.875	122.8 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	1580-1 608 (700-1)		1580-1¾ 608 (700-1¾)	NA
CIRCLING	1660-1 686 (700-1)	1680-1 706 (800-1)	1680-2 706 (800-2)	NA



EC-2. 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	3529
198°	TDZE	974
	Apt Elev	974

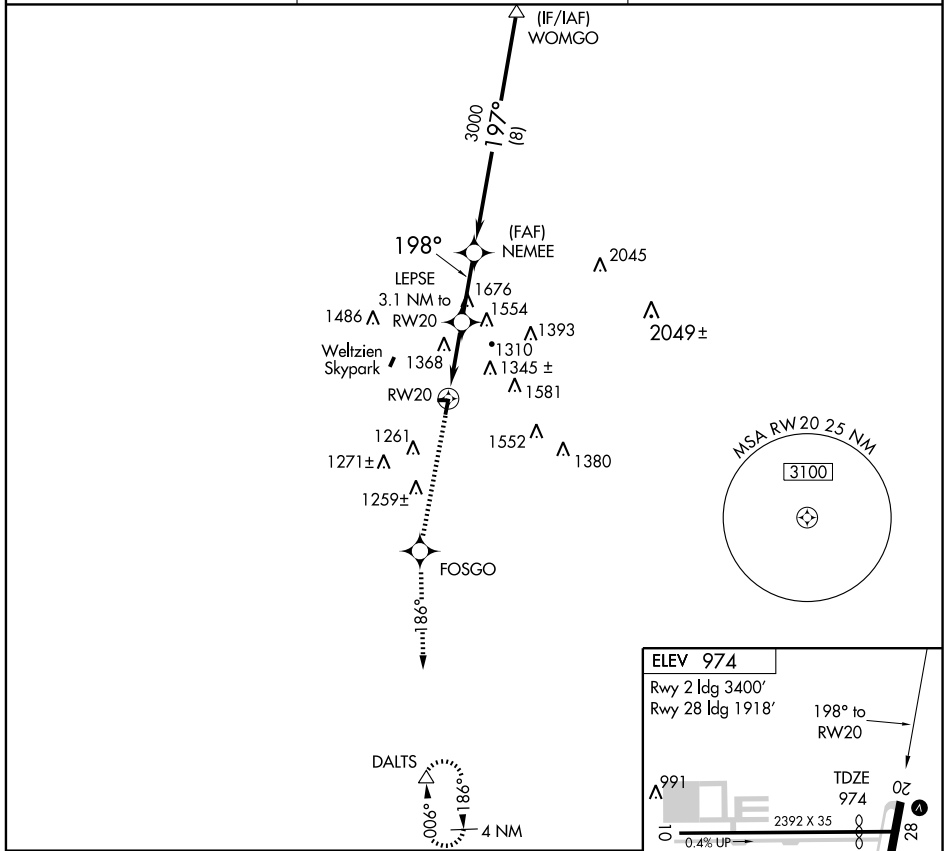
RNAV (GPS) RWY 20
WADSWORTH MUNI (3G3)

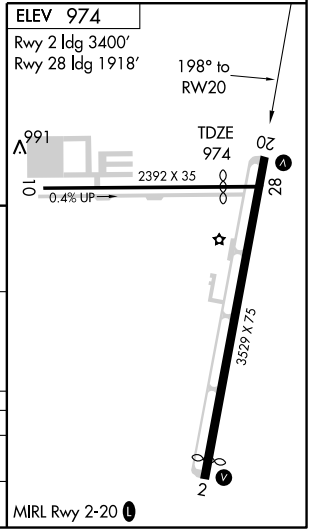
Use Wayne County altimeter setting; when not received, use Akron-Canton altimeter setting and increase all MDAs 20 feet. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Circling NA west of Rwy 2-20. When VGSI INOP, procedure NA at night.

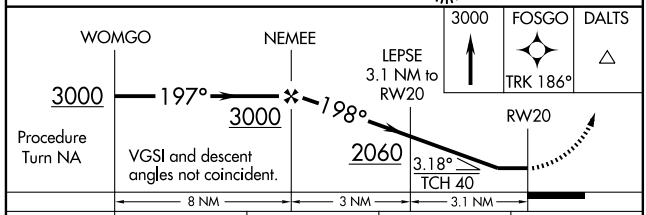
NA

MISSED APPROACH: Climb to 3000 direct FOSGO and via 186° track to DALTS and hold.

WAYNE COUNTY ASOS	AKRON-CANTON APP CON ★	UNICOM
118.075	118.6 371.875	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	1820-1 846 (900-1)	1820-1¼ 846 (900-1¼)	1820-2½ 846 (900-2½)	NA
CIRCLING	1820-1 846 (900-1)	1820-1¼ 846 (900-1¼)	1820-2½ 846 (900-2½)	NA

EC-2. 14 JAN 2010 to 11 FEB 2010

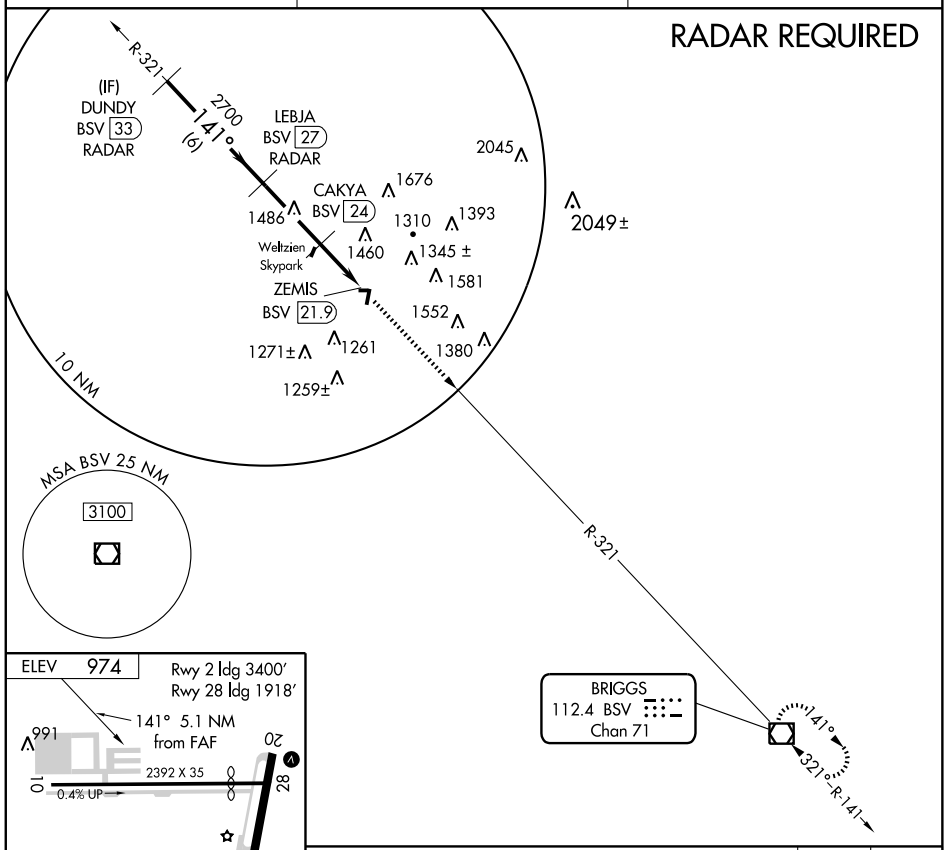
VOR/DME BSV 112.4 Chan 71	APP CRS 141°	Rwy ldg N/A TDZE N/A Apt Elev 974

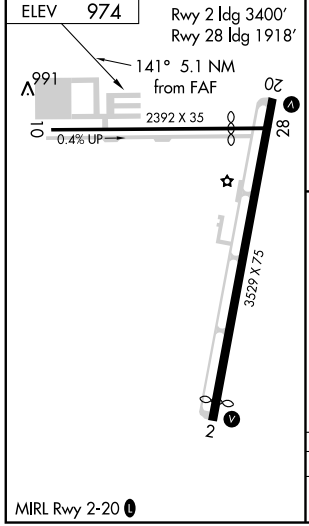
VOR/DME-A
WADSWORTH MUNI (3G3)

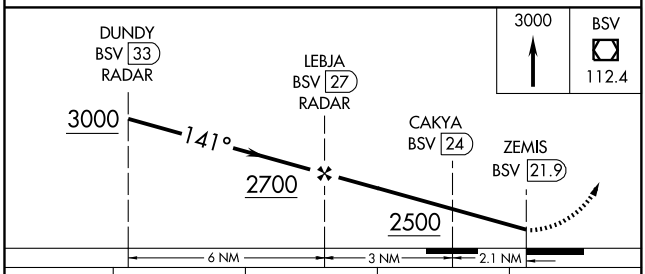
Use Wayne County altimeter setting; when not received, use Akron-Canton altimeter setting and increase all MDAs 20 feet. Circling NA West of Rwy 2-20. When VGSI INOP, procedure NA at night.

MISSED APPROACH: Climb to 3000 direct BSV VOR/DME and hold.

WAYNE COUNTY ASOS	AKRON-CANTON APP CON ★	UNICOM
118.075	118.6 371.875	122.8 (CTAF) L







CATEGORY	A	B	C	D
CIRCLING	1820-1 846 (900-1)	1820-1¼ 846 (900-1¼)	1820-2½ 846 (900-2½)	NA

MIRL Rwy 2-20 L

LOC/DME I-AXV 109.15 Chan 28(Y)	APP CRS 261°	Rwy ldg 5263 TDZE 908 Apt Elev 909

LOC RWY 26

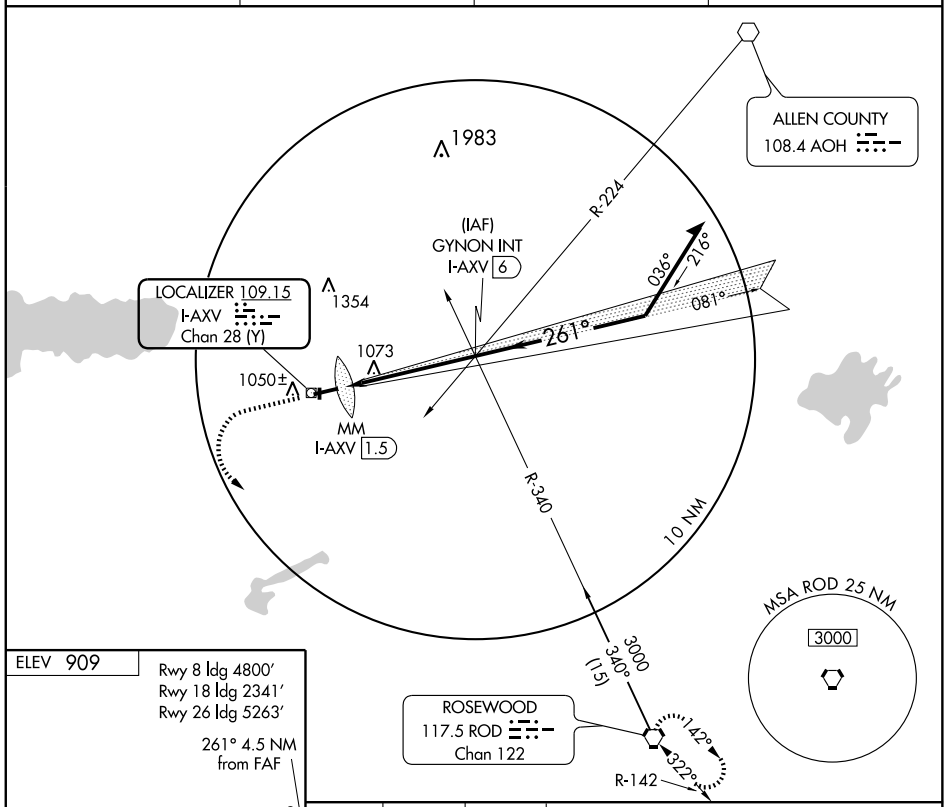
WAPAKONETA/ NEIL ARMSTRONG (AXV)

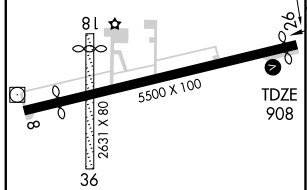
T

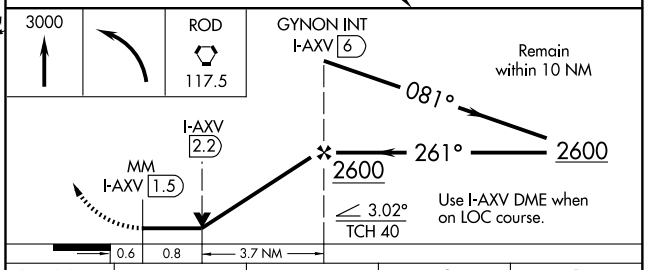
NA

MISSED APPROACH: Climb to 3000 then left turn direct ROD VORTAC and hold.

AWOS-3	DAYTON APP CON	UNICOM	
128.325	118.425 294.5	122.8 (CTAF)	122.7 L







MIRL Rwy 8-26 L

REIL Rwy 26 L

FAF to MAP 4.5 NM					
Knots	60	90	120	150	180
Min:Sec	4:30	3:00	2:15	1:48	1:30

CATEGORY	A	B	C	D
S-26	1380-1 472 (500-1)		1380-1¼ 472 (500-1¼)	NA
CIRCLING	1400-1 491 (500-1)	1440-1 531 (600-1)	1440-1½ 531 (600-1½)	NA

APP CRS	Rwy ldg	4800
081°	TDZE	913
	Apt Elev	913

RNAV (GPS) RWY 8

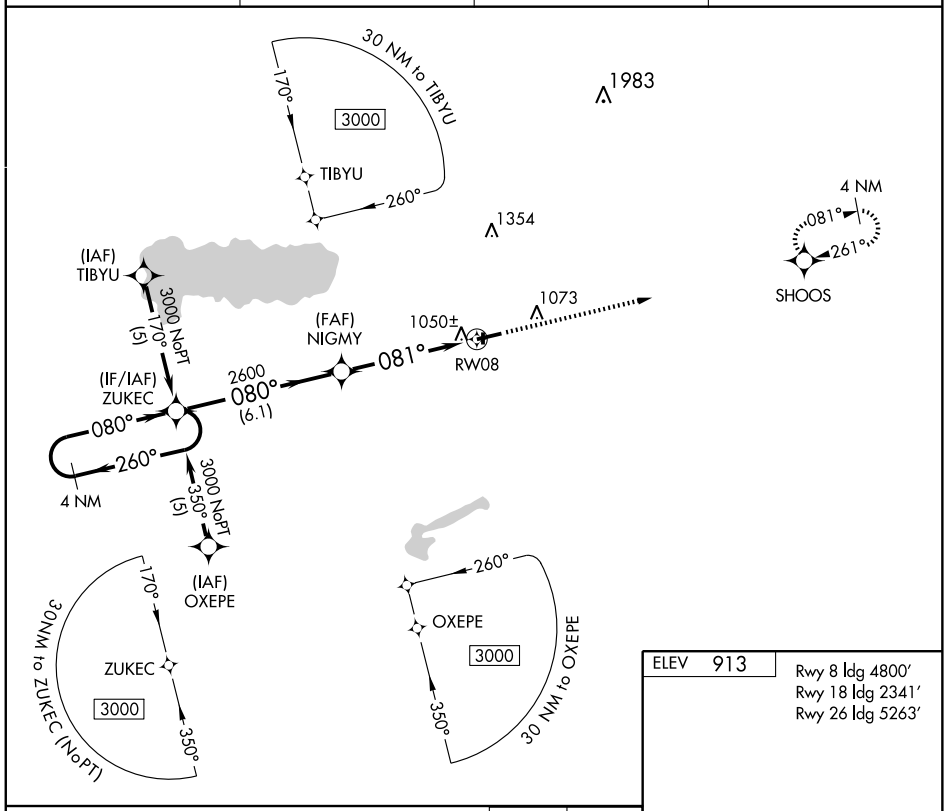
WAPAKONETA/ NEIL ARMSTRONG (AXV)

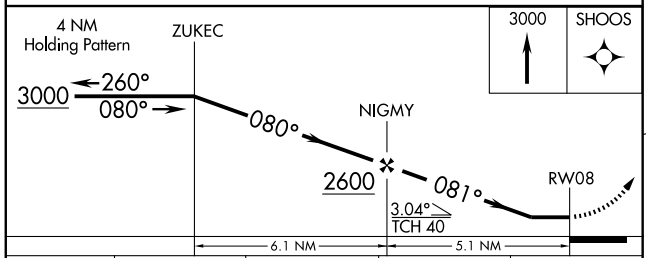
NA

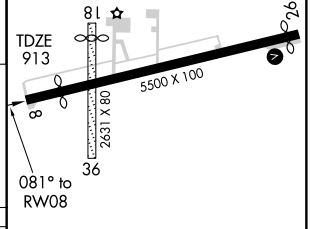
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Lima altimeter setting and increase all MDA 60 feet, increase LNAV Cat C visibility ¼ mile.

MISSED APPROACH: Climb to 3000 direct SHOOS and hold.

AWOS-3	DAYTON APP CON	UNICOM	
128.325	118.425 294.5	122.8 (CTAF)	122.7 L







CATEGORY	A	B	C	D
LNAV MDA	1380-1 467 (500-1)		1380-1¼ 467 (500-1¼)	NA
CIRCLING	1400-1 487 (500-1)	1440-1 527 (600-1)	1440-1½ 527 (600-1½)	NA

MIRL Rwy 8-26 L
REIL Rwy 26 L

EC-2, 14 JAN 2010 to 11 FEB 2010

WAAS CH 72907 W26A	APP CRS 261°	Rwy ldg 5263 TDZE 910 Apt Elev 913

RNAV (GPS) RWY 26

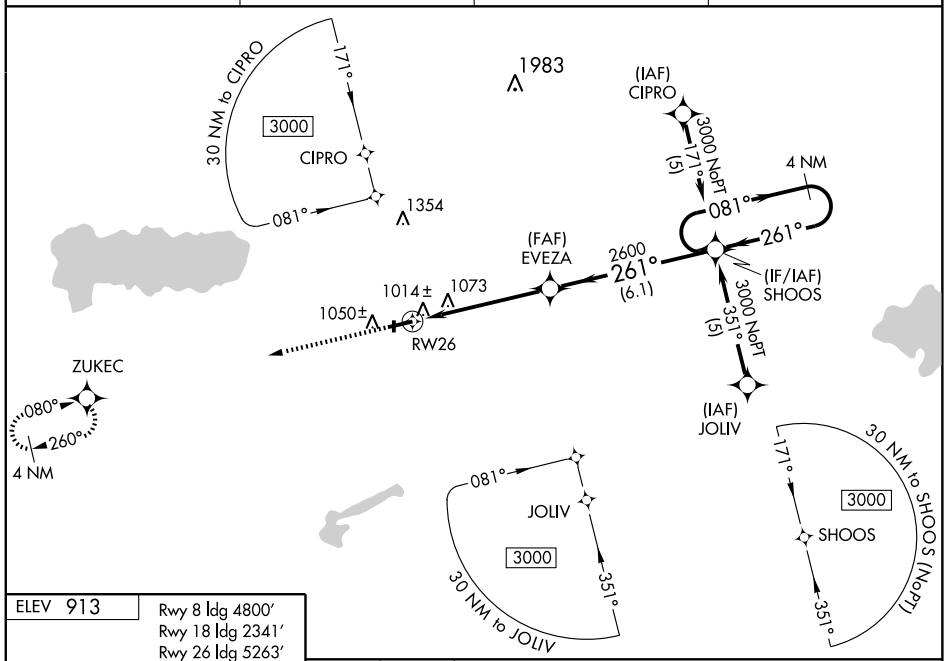
WAPAKONETA/ NEIL ARMSTRONG (AXV)

NA

Baro-VNAV NA when using Lima altimeter setting. DME/DME RNP-0.3 NA. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -16°C (4°F) or above 54°C (130°F). Visibility reduction by helicopters NA. When local altimeter setting not received, use Lima altimeter setting and increase LPV DA to 1291, LNAV/VNAV DA to 1324, and all MDA 60 feet, increase LNAV/VNAV visibility all Cats ¼ mile.

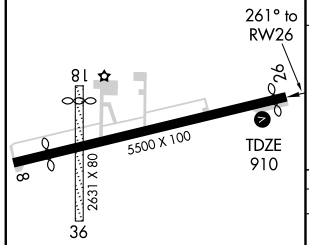
MISSED APPROACH: Climb to 3000 direct ZUKEC and hold.

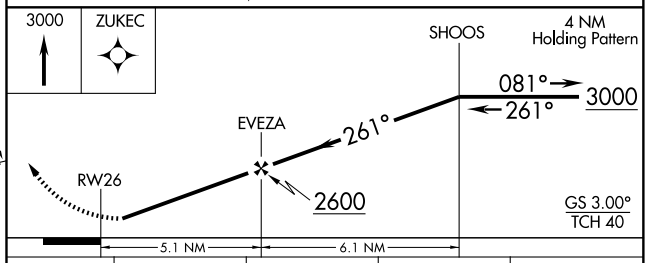
AWOS-3	DAYTON APP CON	UNICOM	
128.325	118.425 294.5	122.8 (CTAF)	122.7 L



ELEV 913

Rwy 8 ldg 4800'
Rwy 18 ldg 2341'
Rwy 26 ldg 5263'





CATEGORY	A	B	C	D
LPV DA	1241-1¼ 331 (400-1¼)			NA
LNAV/ VNAV DA	1274-1¼ 364 (400-1¼)			NA
LNAV MDA	1440-1 530 (600-1)		1440-1½ 530 (600-1½)	NA
CIRCLING	1440-1 527 (600-1)		1440-1½ 527 (600-1½)	NA

MIRL Rwy 8-26 L
REIL Rwy 26 L

EC-2, 14 JAN 2010 to 11 FEB 2010

VORTAC ROD	APP CRS	Rwy ldg	N/A
117.5	322°	TDZE	N/A
Chan 122		Apt Elev	909

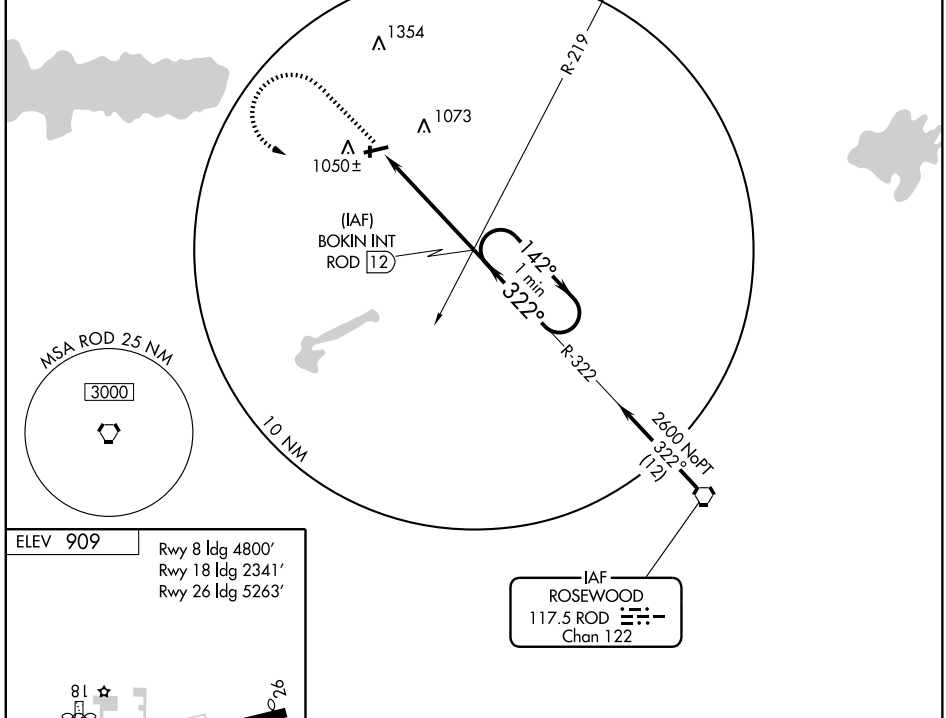
VOR-A

WAPAKONETA/ NEIL ARMSTRONG (AXV)

NA

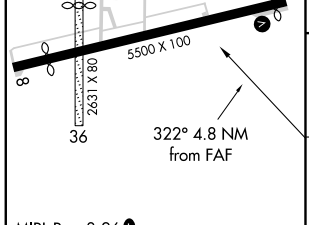
MISSED APPROACH: Climb to 3000 then left turn via ROD R-322 to BOKIN Int/ROD 12 DME and hold.

AWOS-3	DAYTON APP CON	UNICOM	
128.325	118.425 294.5	122.8 (CTAF)	122.7 L

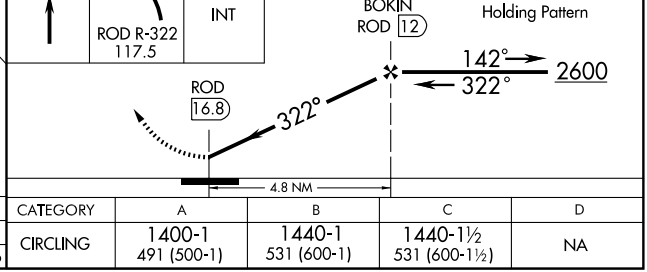


ELEV 909

Rwy 8 ldg 4800′
Rwy 18 ldg 2341′
Rwy 26 ldg 5263′



MIRL Rwy 8-26 L
REIL Rwy 26 L



FAF to MAP 4.8 NM					
Knots	60	90	120	150	180
Min:Sec	4:48	3:12	2:24	1:55	1:36

CATEGORY	A	B	C	D
CIRCLING	1400-1 491 (500-1)	1440-1 531 (600-1)	1440-1½ 531 (600-1½)	NA

EC-2. 14 JAN 2010 to 11 FEB 2010

NDB CSS	APP CRS	Rwy ldg	5097
414	223°	TDZE	979
		Apt Elev	980

NDB RWY 23

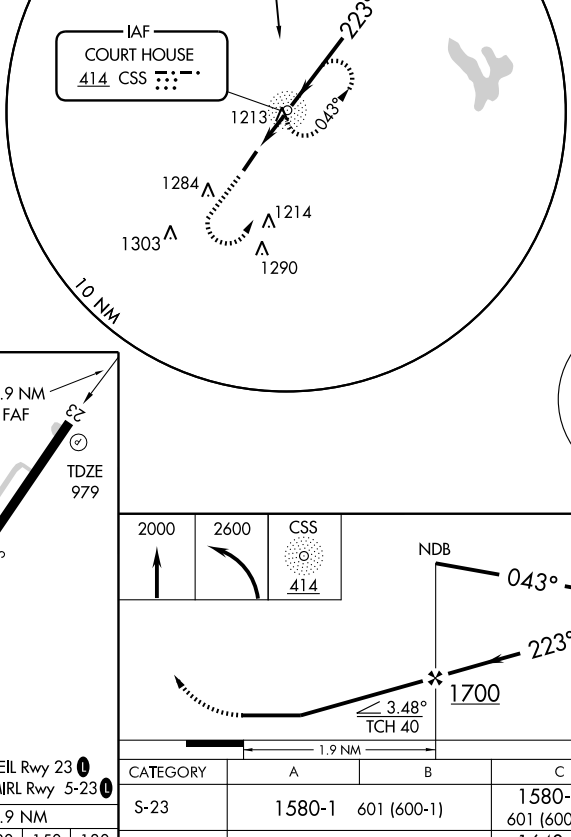
WASHINGTON COURT HOUSE/FAYETTE COUNTY (I23)

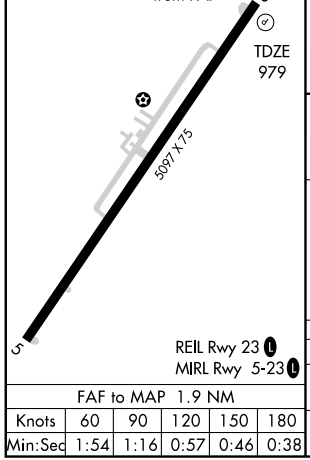
When local altimeter setting not received, use Airborne Airpark altimeter setting and increase all MDAs 60 feet and circling visibility Cats C and D ¼ mile. Visibility reduction by helicopters NA.

NA

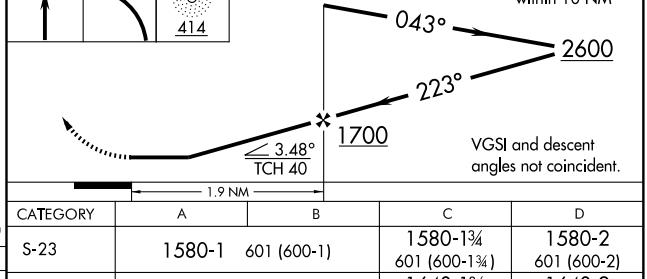
MISSED APPROACH: Climb to 2000, then climbing left turn to 2600 direct CSS NDB and hold.

AWOS-3	COLUMBUS APP CON	UNICOM
118.775	132.3 279.6	122.8 (CTAF) L





FAF to MAP 1.9 NM					
Knots	60	90	120	150	180
Min:Sec	1:54	1:16	0:57	0:46	0:38



CATEGORY	A	B	C	D
S-23	1580-1	601 (600-1)	1580-1¾ 601 (600-1¾)	1580-2 601 (600-2)
CIRCLING	1580-1	600 (600-1)	1640-1¾ 660 (700-1¾)	1640-2 660 (700-2)

EC-2, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	5097
220°	TDZE	979
	Apt Elev	980

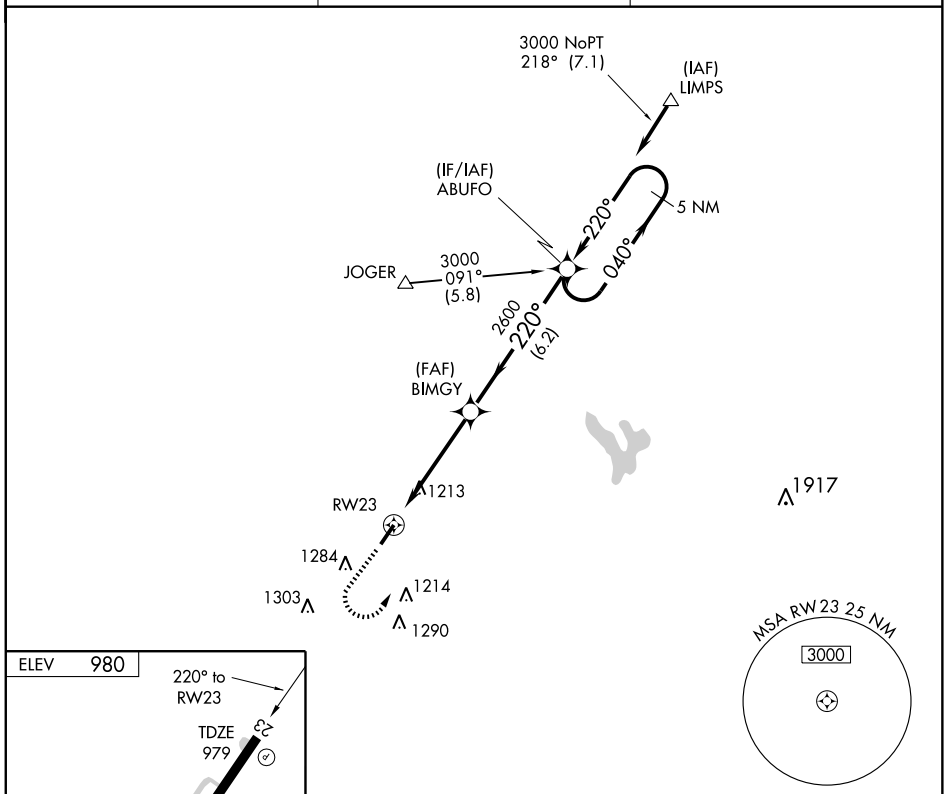
RNAV (GPS) RWY 23

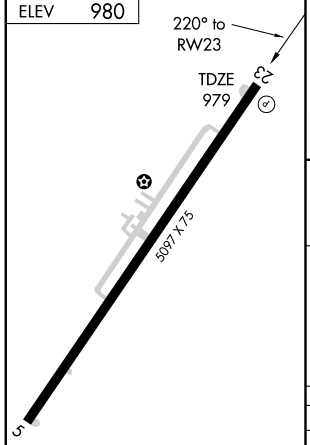
WASHINGTON COURT HOUSE/FAYETTE COUNTY (I23)

NA When local altimeter setting not received, use Airborne Airpark altimeter setting and increase all MDAs 60 feet and visibility Cats C and D ¼ mile. Visibility reduction by helicopters NA. DME/DME RNP-0.3 NA.

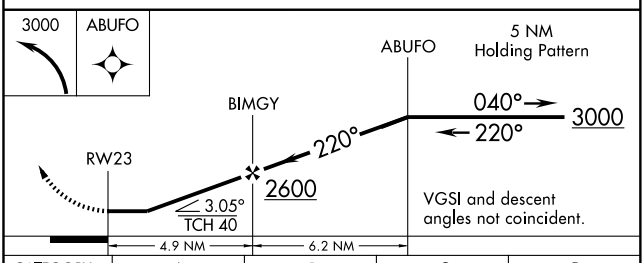
MISSED APPROACH: Climbing left turn to 3000 direct ABUFO and hold.

AWOS-3	COLUMBUS APP CON	UNICOM
118.775	132.3 279.6	122.8 (CTAF) L





REIL Rwy 23 L
MIRL Rwy 5-23 L



CATEGORY	A	B	C	D
LNAV MDA	1540-1 561 (600-1)		1540-1½ 561 (600-1½)	1540-1¾ 561 (600-1¾)
CIRCLING	1580-1 600 (600-1)		1640-1¾ 660 (700-1¾)	1640-2 660 (700-2)

NDB USE	APP CRS	Rwy ldg	3881
375	275°	TDZE	778
		Apt Elev	780

NDB or GPS RWY 27

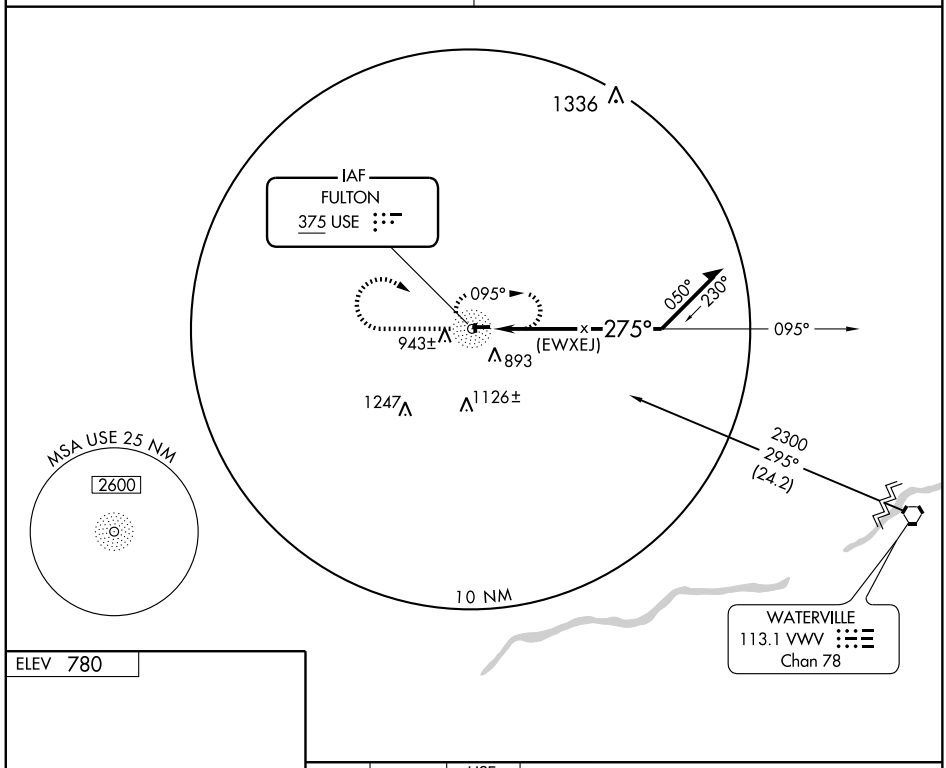
WAUSEON/ FULTON COUNTY (USE)

NA

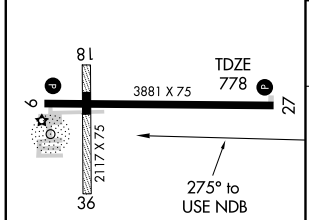
Use Toledo Express altimeter setting.

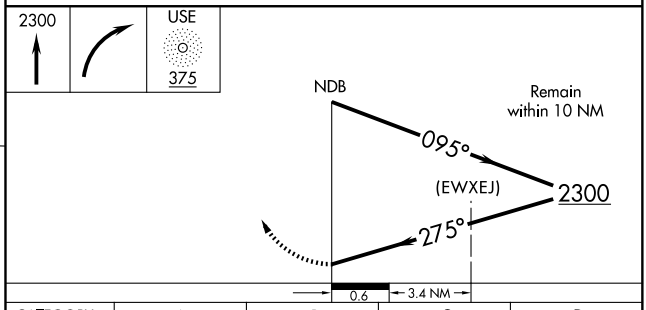
MISSED APPROACH: Climb to 2300 then right turn direct USE NDB and hold.

TOLEDO APP CON	UNICOM
134.35 317.55	123.0 (CTAF) L



ELEV 780





CATEGORY	A	B	C	D
S-27	1300-1 522 (600-1)		1300-1½ 522 (600-1½)	1300-1¾ 522 (600-1¾)
CIRCLING	1360-1 580 (600-1)		1360-1½ 580 (600-1½)	1360-2 580 (600-2)

REIL Rwy 9 and 27 L
LIRL Rwy 9-27 L

EC-2, 14 JAN 2010 to 11 FEB 2010

NDB EOP	APP CRS	Rwy ldg	4900
385	253°	TDZE	660
		Apt Elev	660

NDB RWY 25

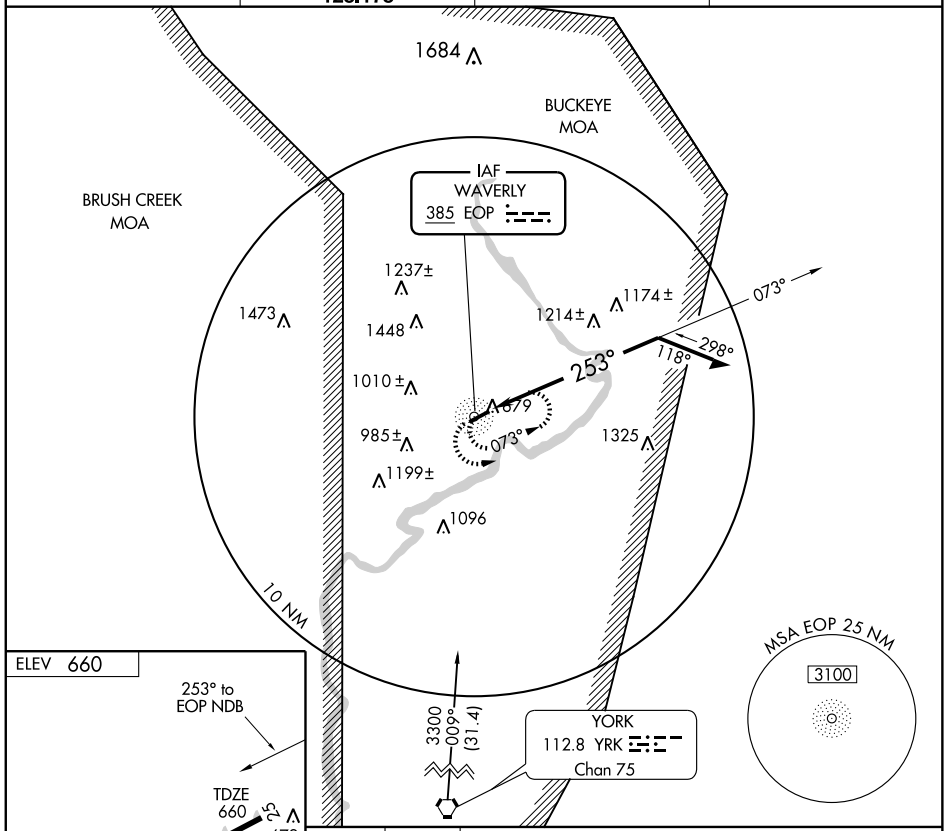
WAVERLY / PIKE COUNTY (EOP)

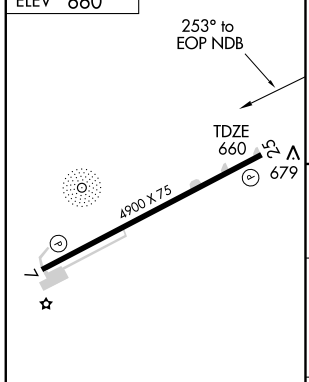
T
NA

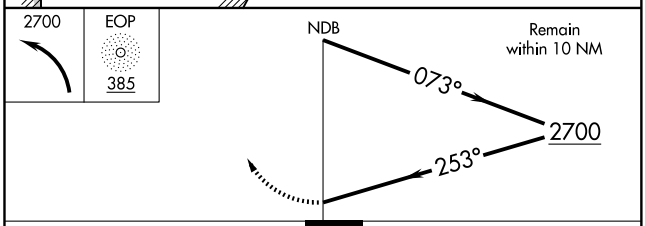
Use Greater Portsmouth Rgnl altimeter setting; if not received, use Ross County altimeter setting.

MISSED APPROACH: Climbing left turn to 2700 in EOP NDB holding pattern.

AWOS-A	GREATER PORTSMOUTH RGNL AWOS-3	INDIANAPOLIS CENTER	UNICOM
118.4	125.175	135.575 290.4	123.0 (CTAF) L







CATEGORY	A	B	C	D
S-25	1620-1¼ 960 (1000-1¼)	1620-1½ 960 (1000-1½)	1620-3	960 (1000-3)
CIRCLING	1620-1¼ 960 (1000-1¼)	1620-1½ 960 (1000-1½)	1620-3	960 (1000-3)

REIL Rwys 7 and 25
MIRL Rwy 7-25 L

EC-2, 14 JAN 2010 to 11 FEB 2010

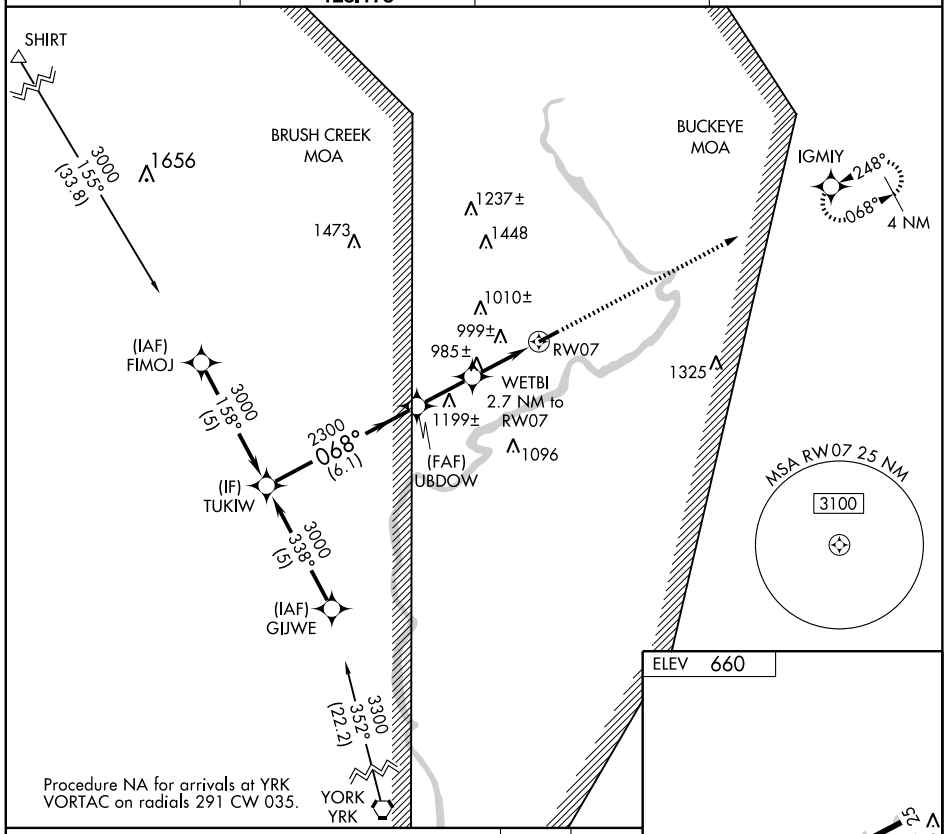
APP CRS	Rwy ldg	4900
068°	TDZE	660
	Apt Elev	660

RNAV (GPS) RWY 7
WAVERLY/PIKE COUNTY (EOP)

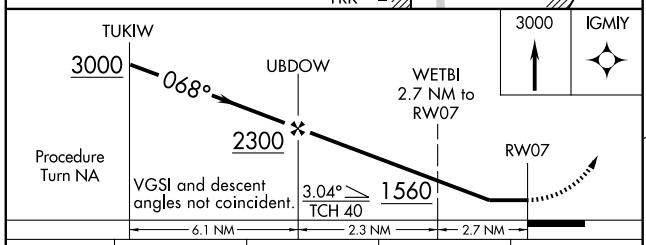
NA DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Use Portsmouth altimeter setting; when not received, use Rickenbacker Intl altimeter setting and increase all MDA 60 feet and LNAV Cats C and D, and Circling Cats A, C, and D visibility ¼ mile.

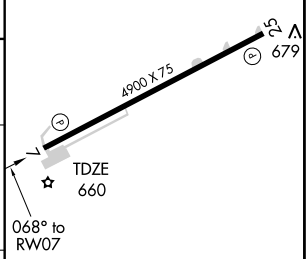
MISSED APPROACH: Climb to 3000 direct IGMIY and hold.

AWOS-A	GREATER PORTSMOUTH RGNL AWOS-3	INDIANAPOLIS CENTER	UNICOM
118.4	125.175	135.575 290.4	123.0 (CTAF) L



ELEV 660





CATEGORY	A	B	C	D
LNAV MDA	1440-1 780 (800-1)	1440-1¼ 780 (800-1¼)	1440-2¼ 780 (800-2¼)	1440-2½ 780 (800-2½)
CIRCLING	1500-1 840 (900-1)	1520-1¼ 860 (900-1¼)	1520-2½ 860 (900-2½)	1520-2¾ 860 (900-2¾)

REIL Rwys 7 and 25
MIRL Rwy 7-25 L

EC-2, 14 JAN 2010 to 11 FEB 2010

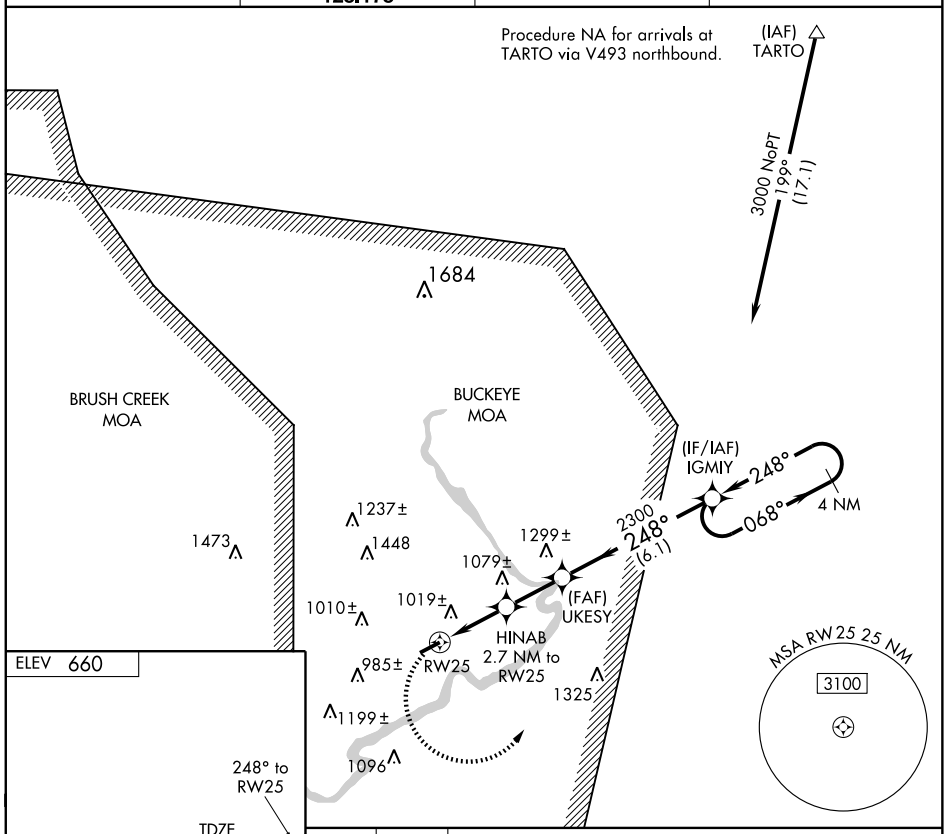
APP CRS	Rwy ldg	4900
248°	TDZE	660
	Apt Elev	660

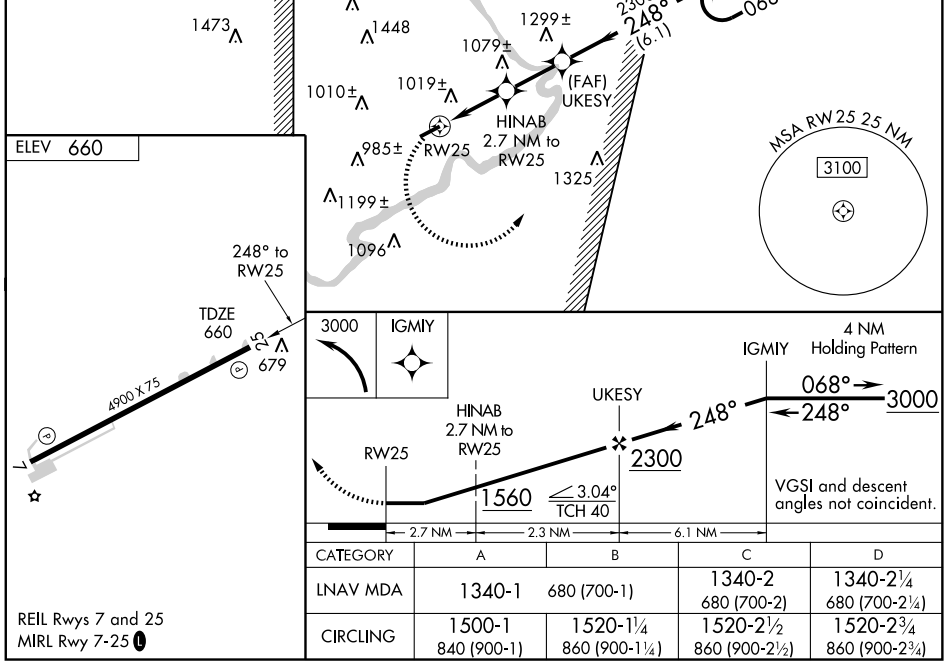
RNAV (GPS) RWY 25
WAVERLY/PIKE COUNTY (EOP)

NA DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Use Portsmouth altimeter setting; when not received, use Rickenbacker Intl altimeter setting and increase all MDA 60 feet and Circling Cats A, C, and D visibility ¼ mile.

MISSED APPROACH: Climbing left turn to 3000 direct IGMIY and hold.

AWOS-A	GREATER PORTSMOUTH RGNL AWOS-3	INDIANAPOLIS CENTER	UNICOM
118.4	125.175	135.575 290.4	123.0 (CTAF) L





CATEGORY	A	B	C	D
LNAV MDA	1340-1	680 (700-1)	1340-2 680 (700-2)	1340-2¼ 680 (700-2¼)
CIRCLING	1500-1 840 (900-1)	1520-1¼ 860 (900-1¼)	1520-2½ 860 (900-2½)	1520-2¾ 860 (900-2¾)

REIL Rwys 7 and 25
MIRL Rwy 7-25 L

NDB AMT	APP CRS	Rwy ldg	3762
359	232°	TDZE	896
		Apt Elev	896

NDB RWY 23

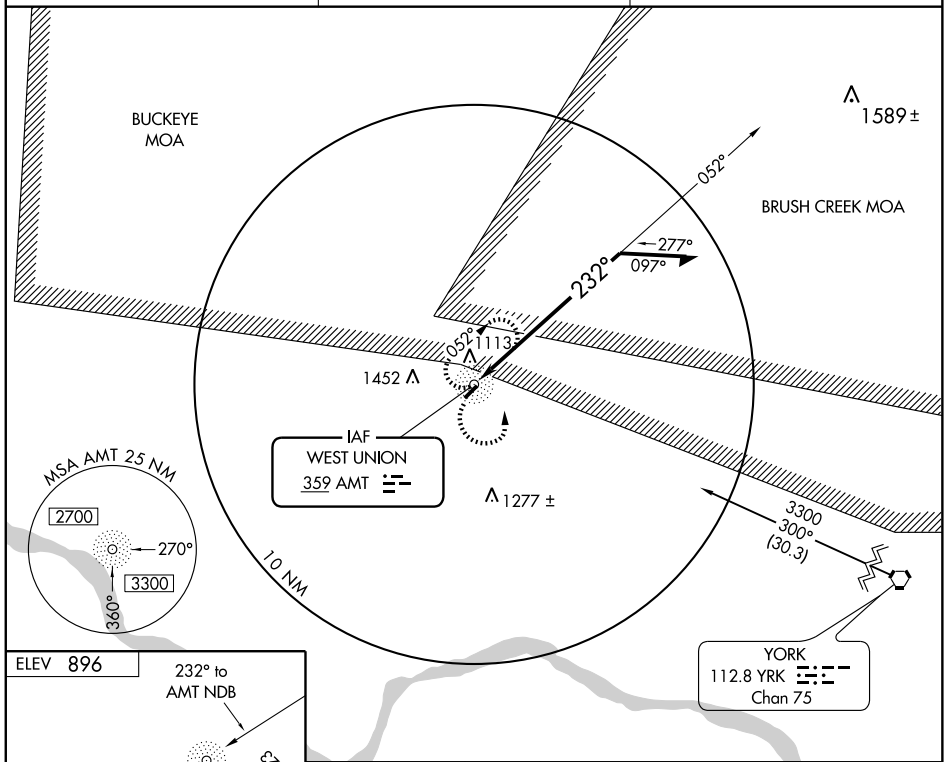
WEST UNION/ALEXANDER SALAMON (AMT)

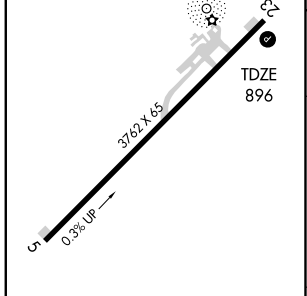
NA

Use Flemingsburg, Kentucky altimeter setting.

MISSED APPROACH: Climbing left turn to 2800 via heading 180°, then left turn direct AMT NDB and hold.

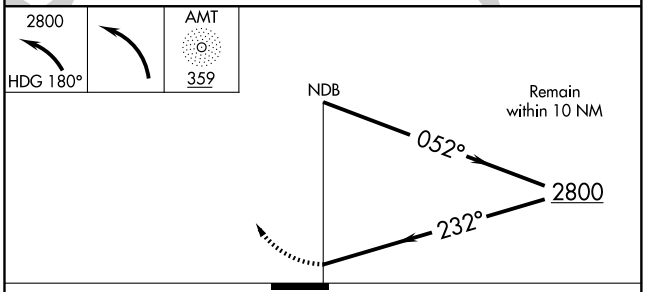
FLEMINGSBURG AWOS-3	INDIANAPOLIS CENTER	UNICOM
118.125	124.225 327.05	122.8 (CTAF) L





REIL Rwy 23 L
MIRL Rwy 5-23 L

Knots	60	90	120	150	180
Min:Sec					



CATEGORY	A	B	C	D
S-23	1660-1 764 (800-1)	1660-1¼ 764 (800-1¼)	1660-2¼ 764 (800-2¼)	NA
CIRCLING	1660-1 764 (800-1)	1660-1¼ 764 (800-1¼)	1660-2¼ 764 (800-2¼)	NA

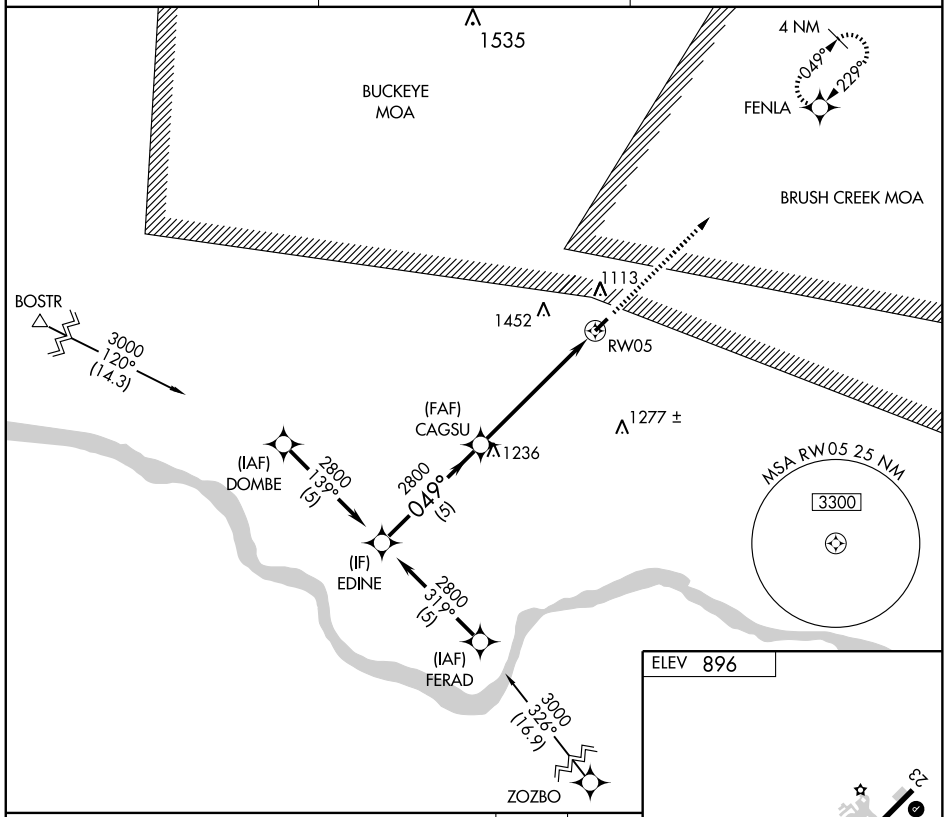
APP CRS	Rwy ldg	3762
049°	TDZE	890
	Apt Elev	896

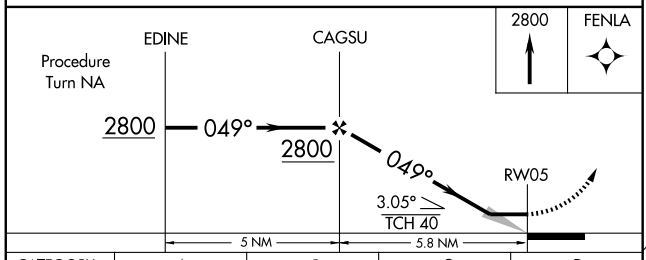
RNAV (GPS) RWY 5
WEST UNION/ALEXANDER SALAMON (AMT)

Use Flemingsburg, Kentucky altimeter setting.
NA DME/DME RNP-0.3 NA.

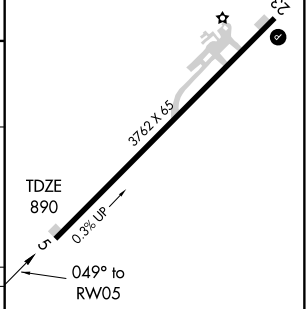
MISSED APPROACH: Climb to 2800 direct FENLA WP and hold.

FLEMINGSBURG AWOS-3	INDIANAPOLIS CENTER	UNICOM
118.125	124.225 327.05	122.8 (CTAF) L





ELEV 896



CATEGORY	A	B	C	D
LNAV MDA	1400-1 510 (600-1)		1400-1½ 510 (600-1½)	NA
CIRCLING	1600-1 704 (800-1)		1600-2 704 (800-2)	NA

REIL Rwy 23 L
MIRL Rwy 5-23 L

EC-2, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	3762
229°	TDZE	896
	Apt Elev	896

RNAV (GPS) RWY 23

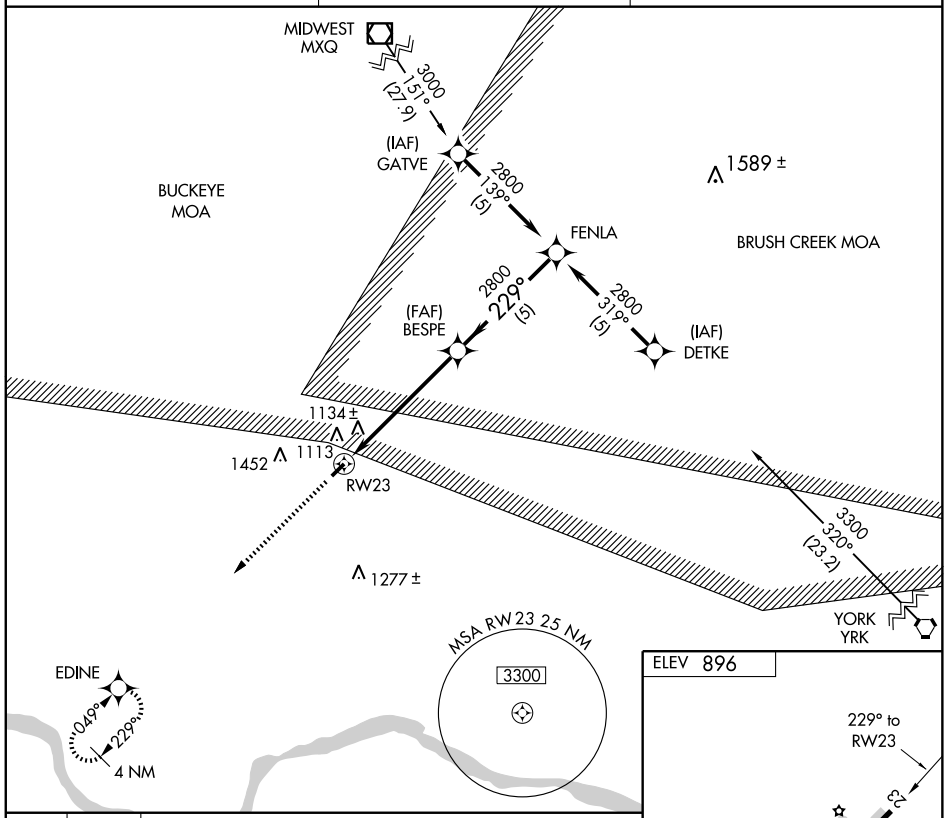
WEST UNION/ALEXANDER SALAMON (AMT)

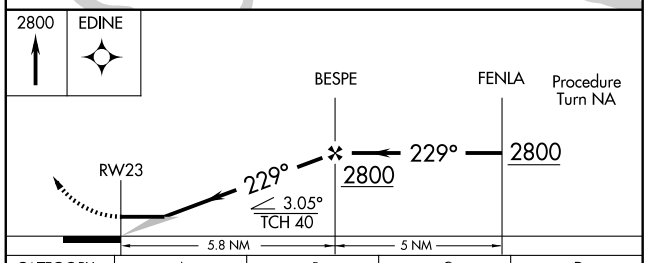
Use Flemingsburg, Kentucky altimeter setting.
DME/DME RNP-0.3 NA.

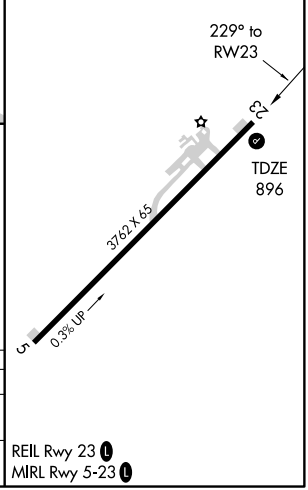
NA

MISSED APPROACH: Climb to 2800 direct EDINE WP and hold.

FLEMINSBURG AWOS-3	INDIANAPOLIS CENTER	UNICOM
118.125	124.225 327.05	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	1440-1 544 (600-1)		1440-1½ 544 (600-1½)	NA
CIRCLING	1600-1 704 (800-1)		1600-2 704 (800-2)	NA

REIL Rwy 23 L
MIRL Rwy 5-23 L

EC-2, 14 JAN 2010 to 11 FEB 2010

VORTAC MFD	APP CRS	Rwy ldg	N/A
108.8	332°	TDZE	N/A
Chan 25		Apt Elev	967

VOR/DME or GPS-A

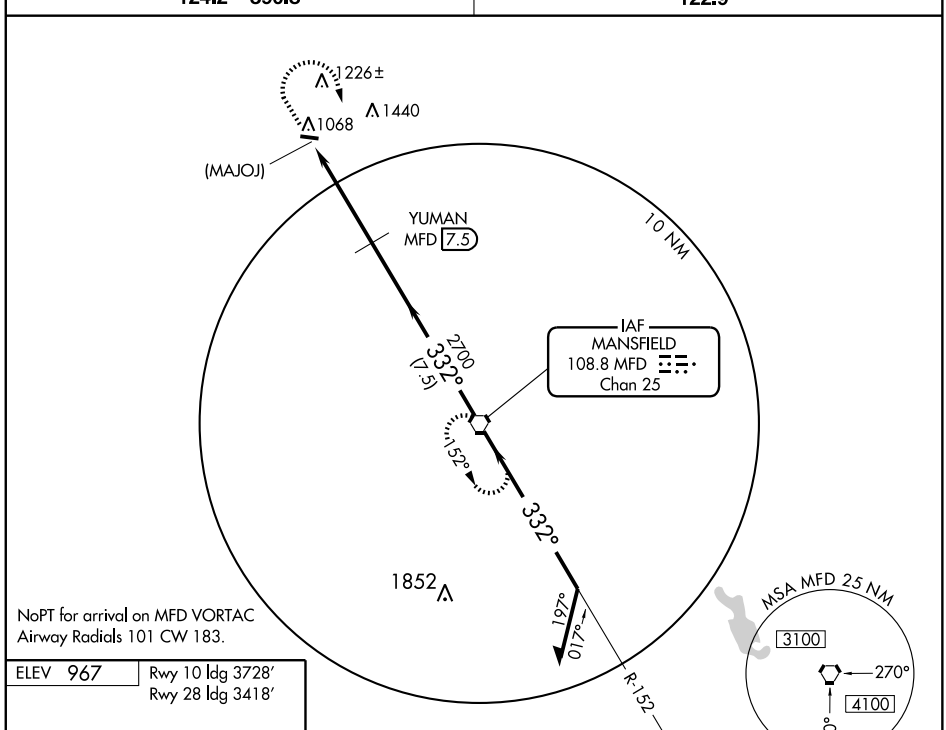
WILLARD (8G1)

T
NA

Use Mansfield altimeter setting; when not received, use Cleveland-Hopkins altimeter setting.

MISSED APPROACH: Climb to 3000 then right turn direct MFD VORTAC and hold.

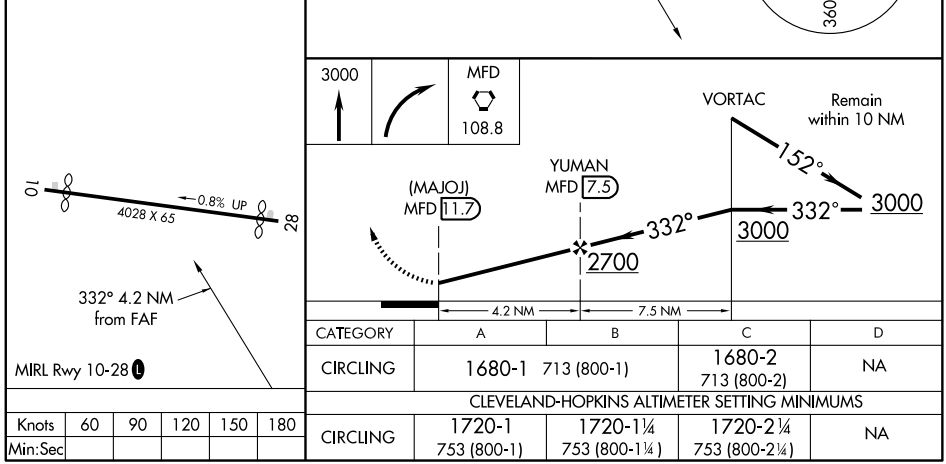
MANSFIELD APP CON ★	CTAF (L)
124.2 390.8	122.9



NoPT for arrival on MFD VORTAC
Airway Radials 101 CW 183.

ELEV 967

Rwy 10 ldg 3728′
Rwy 28 ldg 3418′



Knots	60	90	120	150	180
Min:Sec					

CATEGORY	A	B	C	D
CIRCLING	1680-1 713 (800-1)		1680-2 713 (800-2)	NA
CLEVELAND-HOPKINS ALTIMETER SETTING MINIMUMS				
CIRCLING	1720-1 753 (800-1)	1720-1¼ 753 (800-1¼)	1720-2¼ 753 (800-2¼)	NA

CLEVELAND DEP CON
125.35 346.32

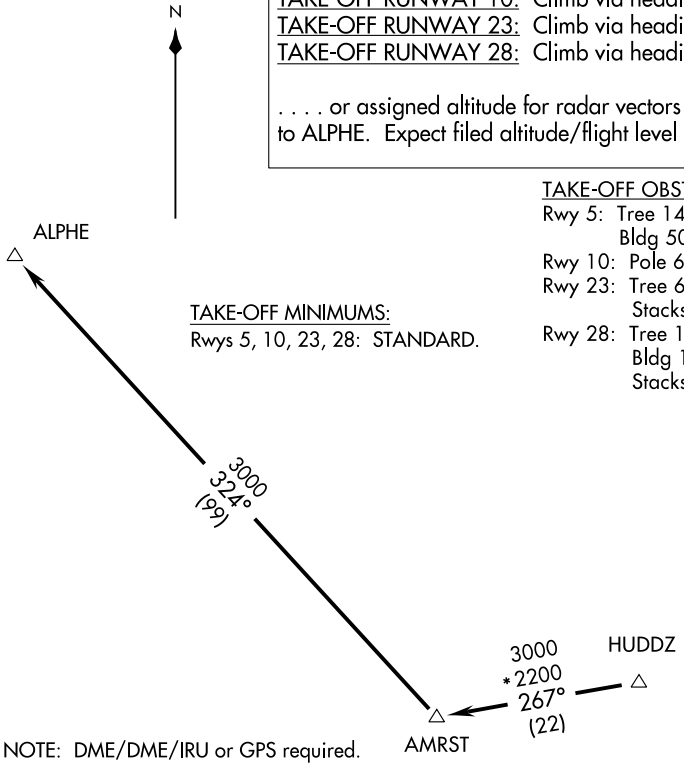
DEPARTURE ROUTE DESCRIPTION

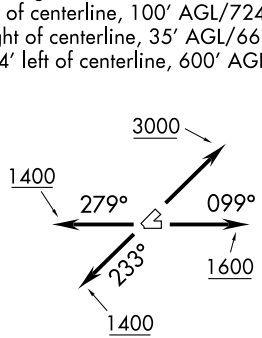
TAKE-OFF RUNWAY 5: Climb via assigned heading to 3000 thence. . . .
TAKE-OFF RUNWAY 10: Climb via heading 099° to 1600 then via assigned heading to 3000, thence. . . .
TAKE-OFF RUNWAY 23: Climb via heading 233° to 1400 then via assigned heading to 3000, thence. . . .
TAKE-OFF RUNWAY 28: Climb via heading 279° to 1400 then via assigned heading to 3000, thence. . . .

. . . . or assigned altitude for radar vectors to HUDDZ, then via 267° track to AMRST, then via 324° track to ALPHE. Expect filed altitude/flight level ten (10) minutes after departure.

TAKE-OFF OBSTACLES:
Rwy 5: Tree 1453′ from DER, 725′ right of centerline, 100′ AGL/724′ MSL.
Bldg 509′ from DER, 429′ right of centerline, 20′ AGL/644′ MSL.
Rwy 10: Pole 663′ from DER, 64′ right of centerline, 52′ AGL/675′ MSL.
Rwy 23: Tree 634′ from DER, 561′ right of centerline, 100′ AGL/724′ MSL.
Stacks 1.8 NM from DER, 1 NM right of centerline, 600′ AGL/1207′ MSL.
Rwy 28: Tree 1336′ from DER, 699′ left of centerline, 100′ AGL/724′ MSL.
Bldg 1101′ from DER, 337′ right of centerline, 35′ AGL/661′ MSL.
Stacks 2.1 NM from DER, 4444′ left of centerline, 600′ AGL/1207′ MSL.

TAKE-OFF MINIMUMS:
Rwys 5, 10, 23, 28: STANDARD.





NOTE: DME/DME/IRU or GPS required.
NOTE: RNAV 1.
NOTE: RADAR REQUIRED.

NOTE: Chart not to scale.

[ALPHE2.ALPHE] 09127

ALPHE TWO DEPARTURE (RNAV)

SL-753 (FAA)

WILLOUGHBY LOST NATION MUNI (LNN)
WILLOUGHBY, OHIO

CLEVELAND DEP CON
125.35 346.325

TAKE-OFF MINIMUMS:
Rwys 5, 10, 23, 28:
STANDARD.

NOTE: RADAR REQUIRED

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 5: Climb via assigned heading to 3000 thence. . . .

TAKE-OFF RUNWAY 10: Climb via heading 099° to 1600 then via assigned heading to 3000 thence. . . .

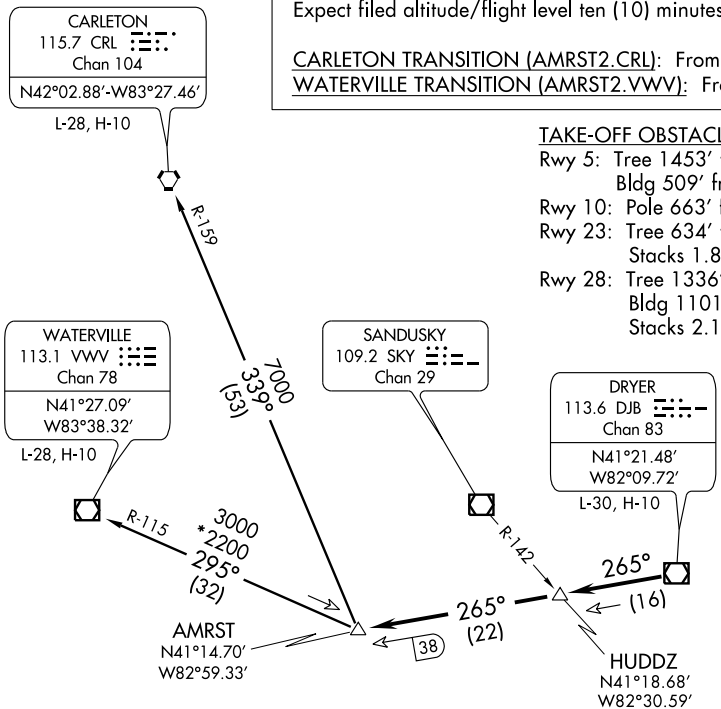
TAKE-OFF RUNWAY 23: Climb via heading 233° to 1400 then via assigned heading to 3000 thence. . . .

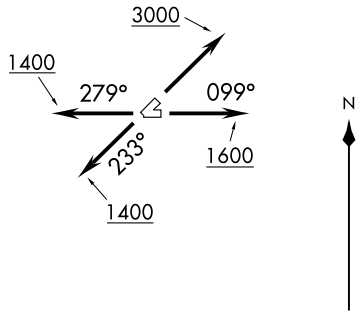
TAKE-OFF RUNWAY 28: Climb via heading 279° to 1400 then via assigned heading to 3000 thence. . . .

. . . . or assigned altitude for vectors to intercept the DJB VOR/DME R-265 to AMRST INT then via (Transition). Expect filed altitude/flight level ten (10) minutes after departure.

CARLETON TRANSITION (AMRST2.CRL): From over AMRST INT via CRL R-159 to CRL VORTAC.
WATERVILLE TRANSITION (AMRST2.VWV): From over AMRST INT via VWV R-115 to VWV VOR/DME.

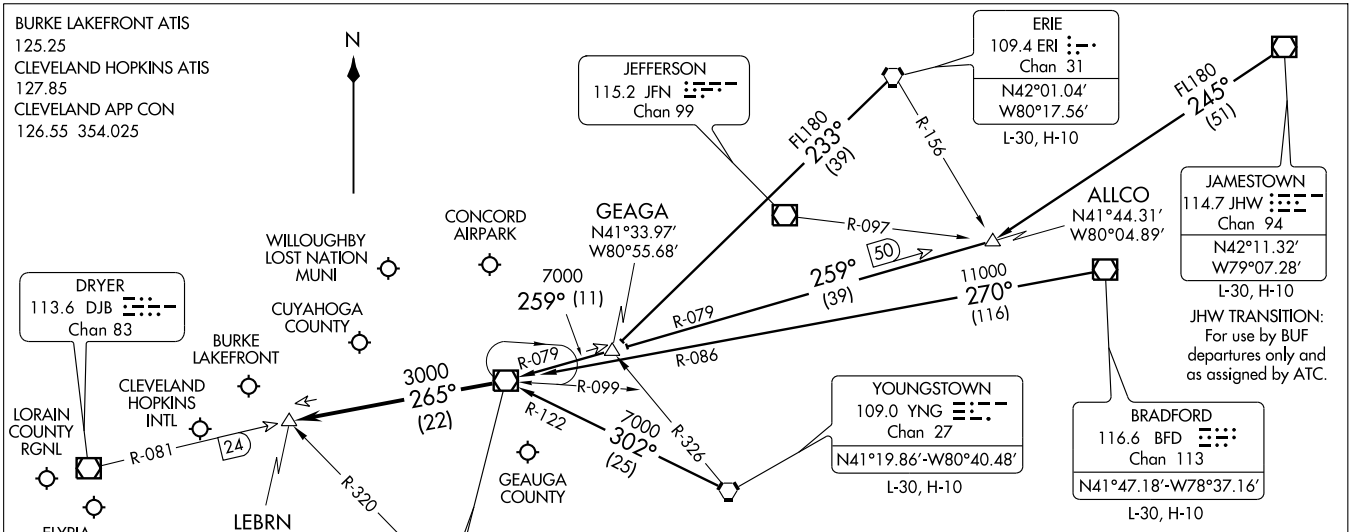
TAKE-OFF OBSTACLES:
Rwy 5: Tree 1453′ from DER, 725′ right of centerline, 100′ AGL/724′ MSL.
Bldg 509′ from DER, 429′ right of centerline, 20′ AGL/644′ MSL.
Rwy 10: Pole 663′ from DER, 64′ right of centerline, 52′ AGL/675′ MSL.
Rwy 23: Tree 634′ from DER, 561′ right of centerline, 100′ AGL/724′ MSL.
Stacks 1.8 NM from DER, 1 NM right of centerline, 600′ AGL/1207′ MSL.
Rwy 28: Tree 1336′ from DER, 699′ left of centerline, 100′ AGL/724′ MSL.
Bldg 1101′ from DER, 337′ right of centerline, 35′ AGL/661′ MSL.
Stacks 2.1 NM from DER, 4444′ left of centerline, 600′ AGL/1207′ MSL.





NOTE: Chart not to scale.

CHARDON TWO ARRIVAL



VERTICAL NAVIGATION PLANNING INFORMATION

TURBOJETS: Expect clearance to cross at 10,000′ and 250 Kts.
PROPS: Expect clearance to cross at 9000′.

NOTE: RADAR Required.

NOTE: Chart not to scale.

ARRIVAL ROUTE DESCRIPTION

BRADFORD TRANSITION (BFD.CXR2): From over BFD VOR/DME via BFD R-270 and CXR R-086 to CXR VOR/DME. Thence . . . .

ERIE TRANSITION (ERI.CXR2): From over ERI VORTAC via ERI R-233 to GEAGA INT, then via CXR R-079 to CXR VOR/DME. Thence . . . .

JAMESTOWN TRANSITION (JHW.CXR2): (For use by BUF departures only and as assigned by ATC) From over JHW VOR/DME via JHW R-245 to ALLCO INT, then via CXR R-079 to CXR VOR/DME. Thence . . . .

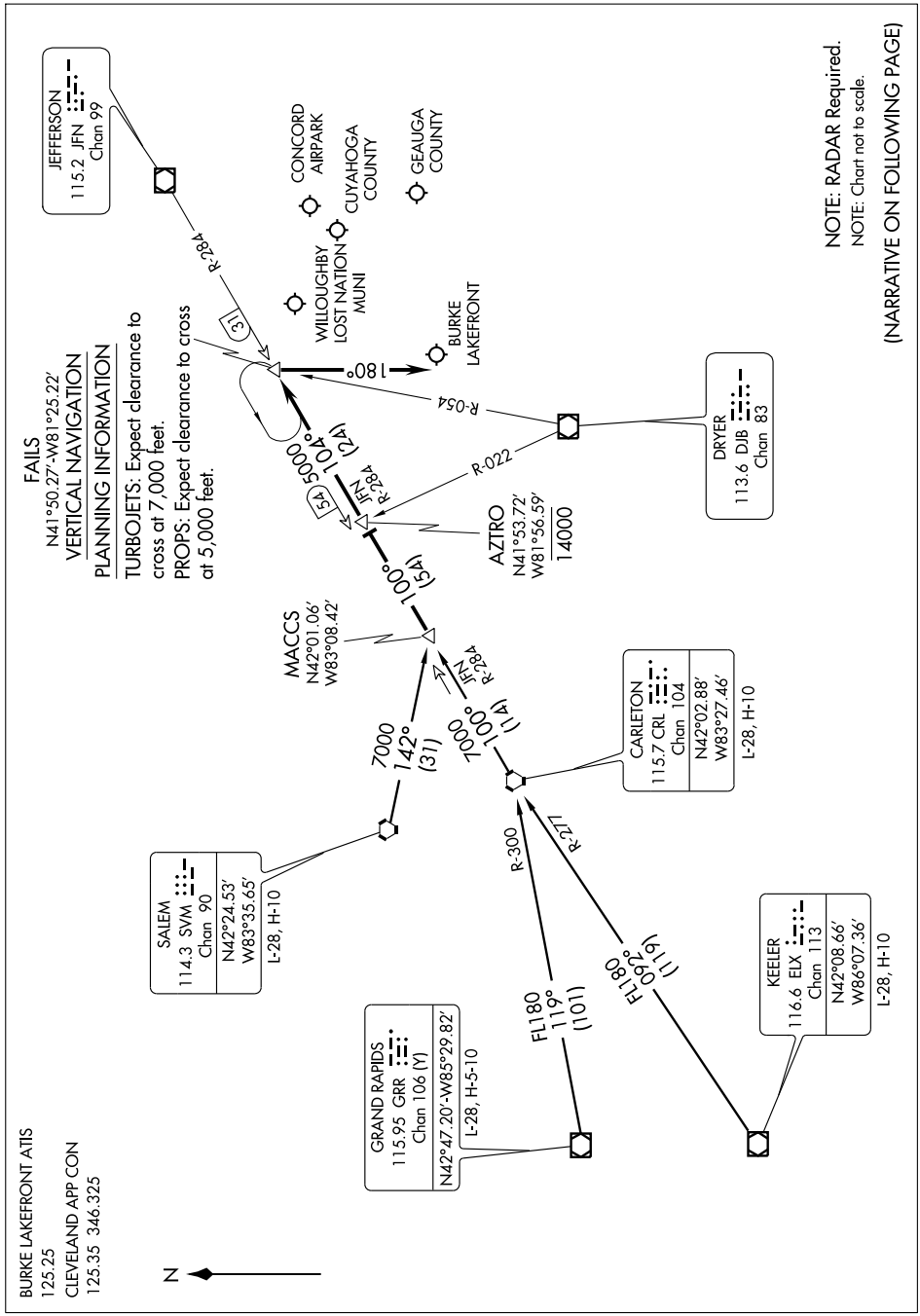
YOUNGSTOWN TRANSITION (YNG.CXR2): From over YNG VORTAC via YNG R-302 and CXR R-122 to CXR VOR/DME. Thence . . . .

. . . . From CXR VOR/DME via R-265 to LEBRN INT, expect vectors to final approach course.

FAILS ONE ARRIVAL

ST-5370 (FAA)

CLEVELAND, OHIO



ARRIVAL ROUTE DESCRIPTION

CARLETON TRANSITION (CRL.FAILS1): From over CRL VORTAC via CRL R-100 and JFN R-284 to MACCS INT. Thence. . . .
GRAND RAPIDS TRANSITION (GRR.FAILS1): From over GRR VOR/DME via GRR R-119 and CRL R-300 to CRL VORTAC, then via CRL R-100 and JFN R-284 to MACCS INT. Thence. . . .
KEELER TRANSITION (ELX.FAILS1): From over ELX VOR/DME via ELX R-092 and CRL R-277 to CRL VORTAC, then via CRL R-100 and JFN R-284 to MACCS INT. Thence. . . .
SALEM TRANSITION (SVM.FAILS1): From over SVM VORTAC via heading 142° to MACCS INT. Thence. . . .

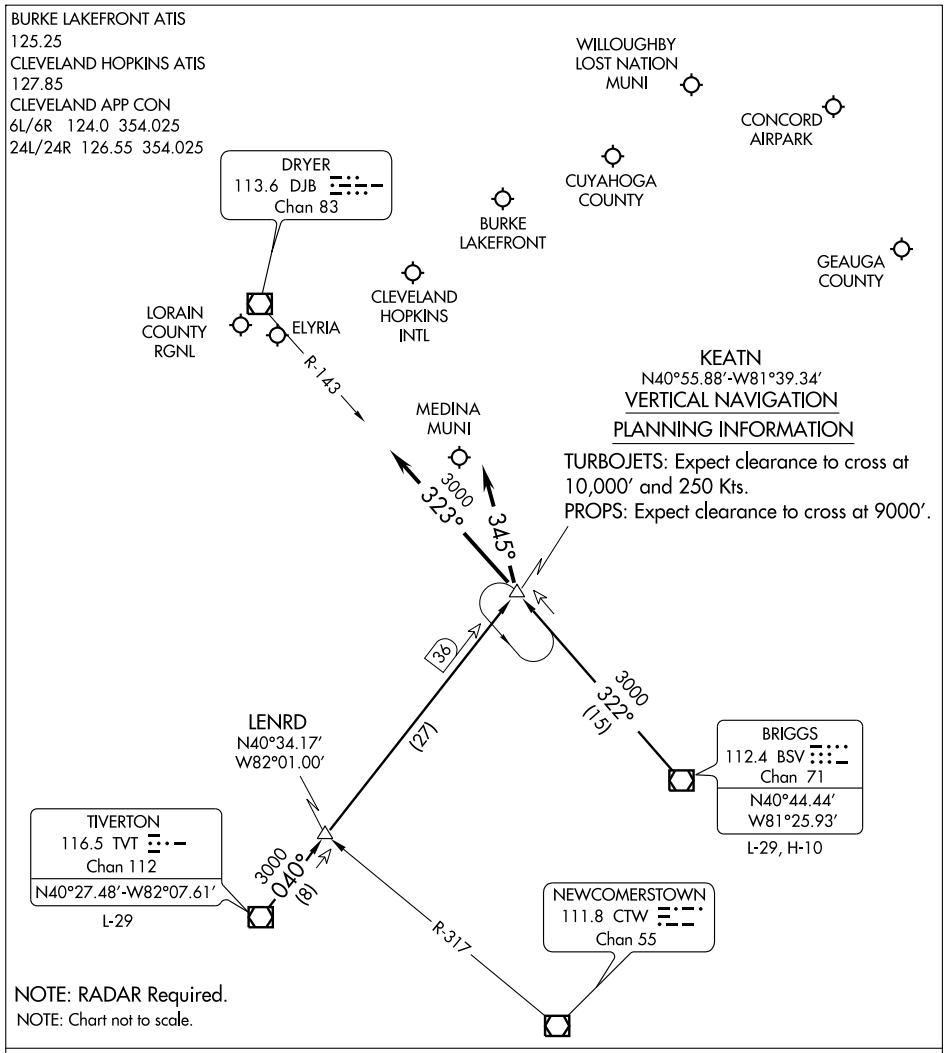
. . . . From over MACCS INT, via CRL VORTAC R-100 to AZTRO INT, then via JFN VOR/DME R-284 to FAILS INT. From FAILS fly heading 180°.
Expect radar vectors to final approach course.

EC-2, 14 JAN 2010 to 11 FEB 2010

KEATN FOUR ARRIVAL

ST-84 (FAA)

CLEVELAND, OHIO



ARRIVAL ROUTE DESCRIPTION

BRIGGS TRANSITION (BSV.KEATN4): From over BSV VOR/DME via BSV R-322 to KEATN INT. Thence. . . .
TIVERTON TRANSITION (TVT.KEATN4): From over TVT VOR/DME via TVT R-040 to KEATN INT. Thence. . . .

LANDING CLE RWY 24L/R: . . . .Depart KEATN INT heading 345°. Expect radar vectors to final approach course.
LANDING CLE RWY 6L/R: . . . .Depart KEATN INT via DJB R-143 to DJB VOR/DME. Expect radar vectors to final approach course.
LANDING ALL OTHER AIRPORTS: . . . .From KEATN INT expect radar vectors to final approach course.

EC-2, 14 JAN 2010 to 11 FEB 2010

NDB LQL	APP CRS	Rwy ldg	4272
263	099°	TDZE	625
		Apt Elev	626

NDB RWY 10

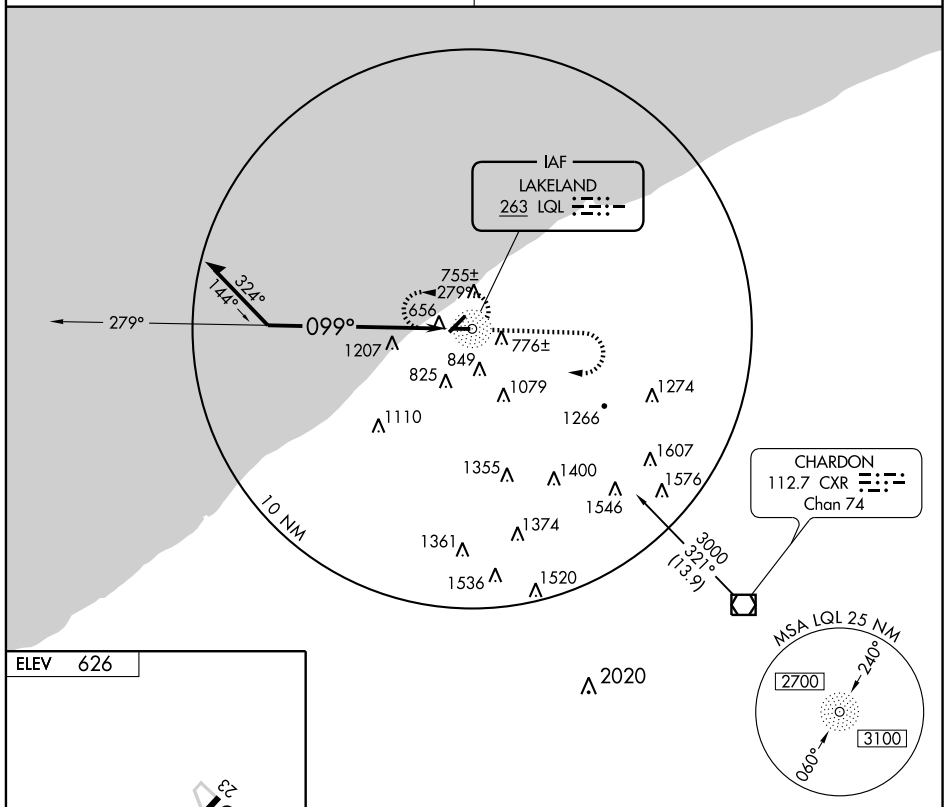
WILLOUGHBY LOST NATION MUNI (LNN)

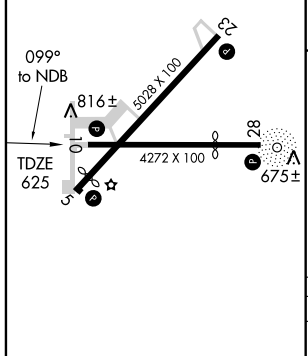
Visibility reduction by helicopters NA.
Use Burke Lakefront altimeter setting; when not received, use Cleveland-Hopkins Intl altimeter setting and increase all MDA 40 feet.

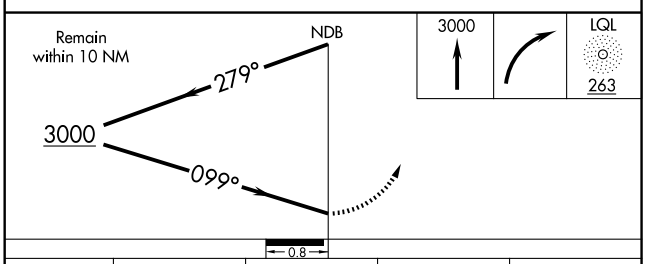
NA

MISSED APPROACH: Climb to 3000 then right turn direct LQL NDB and hold.

CLEVELAND APP CON	UNICOM
125.35 354.025	122.725 (CTAF) L







CATEGORY	A	B	C	D
S-10	1700-1¼ 1075 (1100-1¼)	1700-1½ 1075 (1100-1½)	1700-3 1075 (1100-3)	NA
CIRCLING	1700-1¼ 1074 (1100-1¼)	1700-1½ 1074 (1100-1½)	1700-3 1074 (1100-3)	NA

REIL Rwys 5, 10, 23 and 28 L
MIRL Rwys 5-23 and 10-28 L

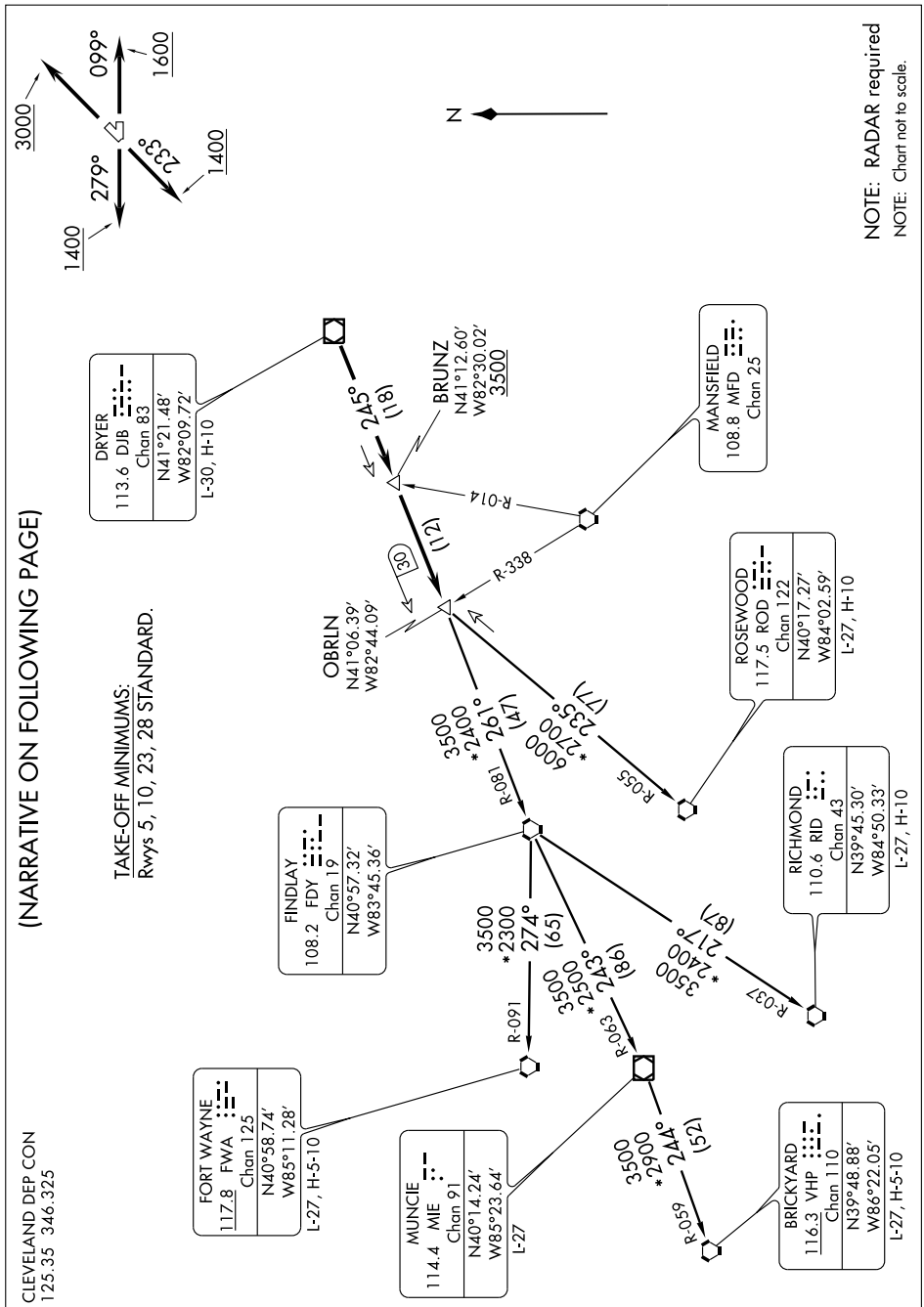
EC-2, 14 JAN 2010 to 11 FEB 2010

OBRLN TWO DEPARTURE

WILLOUGHBY LOST NATION MUNI (LNN)
WILLOUGHBY, OHIO

(NARRATIVE ON FOLLOWING PAGE)

TAKE-OFF MINIMUMS:
Rwys 5, 10, 23, 28 STANDARD.



DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 5: Climb via assigned heading to 3000 thence. . . .
TAKE-OFF RUNWAY 10: Climb via heading 099° to 1600 then via assigned heading to 3000 thence. . . .
TAKE-OFF RUNWAY 23: Climb via heading 233° to 1400 then via assigned heading to 3000 thence. . . .
TAKE-OFF RUNWAY 28: Climb via heading 279° to 1400 then via assigned heading to 3000 thence. . . .

. . . . or assigned altitude for vectors to intercept DJB VOR/DME R-245, cross BRUNZ INT at or above 3500 then proceed to OBRLN INT then via (transition). Expect filed altitude/flight level ten (10) minutes after departure.

BRICKYARD TRANSITION (OBRLN2.VHP): From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-243 and MIE R-063 to MIE VOR/DME, then via MIE R-244 and VHP R-059 to VHP VORTAC.
FORT WAYNE TRANSITION (OBRLN2.FWA): (For use by Fort Wayne arrivals only and ATC use as assigned.) From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-274 and FWA R-091 to FWA VORTAC.
MUNCIE TRANSITION (OBRLN2.MIE): (For use by Indianapolis arrivals only and ATC use as assigned). From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-243 and MIE R-063 to MIE VOR/DME.
RICHMOND TRANSITION (OBRLN2.RID): From over OBRLN INT via FDY R-081 to FDY VORTAC, then via FDY R-217 and RID R-037 to RID VORTAC.
ROSEWOOD TRANSITION (OBRLN2.ROD): (For use at or below FL220 only and ATC use as assigned). From over OBRLN INT via ROD R-055 to ROD VORTAC.

TAKE-OFF OBSTACLES:
Rwy 5: Tree 1453′ from DER, 725′ right of centerline, 100′ AGL/724′ MSL.
Bldg 509′ from DER, 429′ right of centerline, 20′ AGL/644′ MSL.
Rwy 10: Pole 663′ from DER, 64′ right of centerline, 52′ AGL/675′ MSL.
Rwy 23: Tree 634′ from DER, 561′ right of centerline, 100′ AGL/724′ MSL.
Stacks 1.8 NM from DER, 1 NM right of centerline, 600′ AGL/1207′ MSL.
Rwy 28: Tree 1336′ from DER, 699′ left of centerline, 100′ AGL/724′ MSL.
Bldg 1101′ from DER, 337′ right of centerline, 35′ AGL/661′ MSL.
Stacks 2.1 NM from DER, 4444′ left of centerline, 600′ AGL/1207′ MSL.

EC-2, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	4600
053°	TDZE	625
	Apt Elev	626

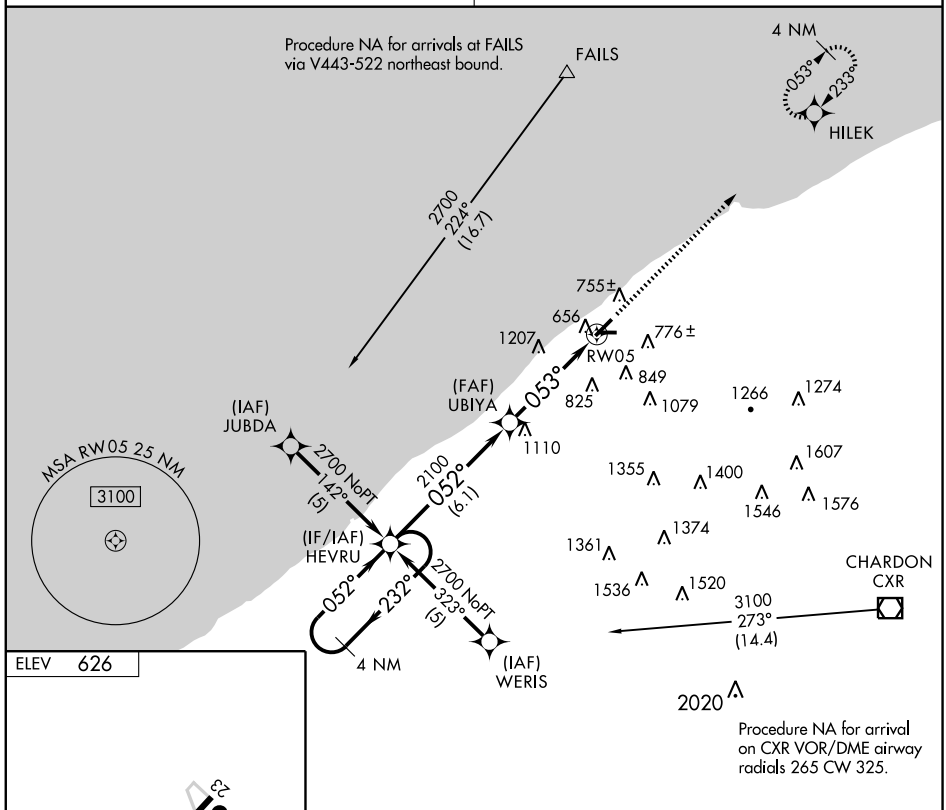
RNAV (GPS) RWY 5
WILLOUGHBY LOST NATION MUNI (LNN)

NA

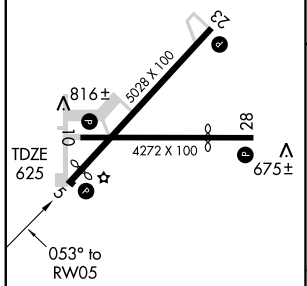
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Use Burke Lakefront altimeter setting; when not received, use Cleveland-Hopkins Intl altmeter setting and increase all MDA 40 feet.

MISSED APPROACH: Climb to 2300 direct HILEK and hold.

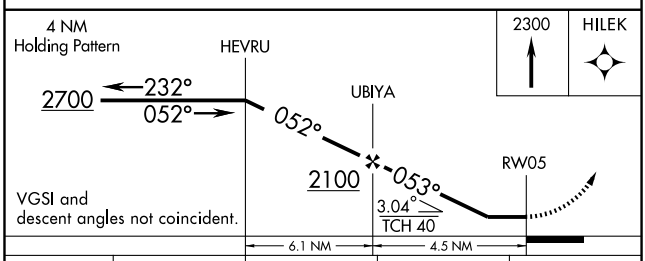
CLEVELAND APP CON	UNICOM
125.35 354.025	122.725 (CTAF) L



ELEV 626



REIL Rwys 5, 10, 23 and 28 L
MIRL Rwys 5-23 and 10-28 L



CATEGORY	A	B	C	D
LNAV MDA	1460-1 835 (900-1)	1460-1¼ 835 (900-1¼)	1460-2½ 835 (900-2½)	NA
CIRCLING	1460-1 834 (900-1)	1460-1¼ 834 (900-1¼)	1460-2½ 834 (900-2½)	NA

EC-2. 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	4272
098°	TDZE	625
	Apt Elev	626

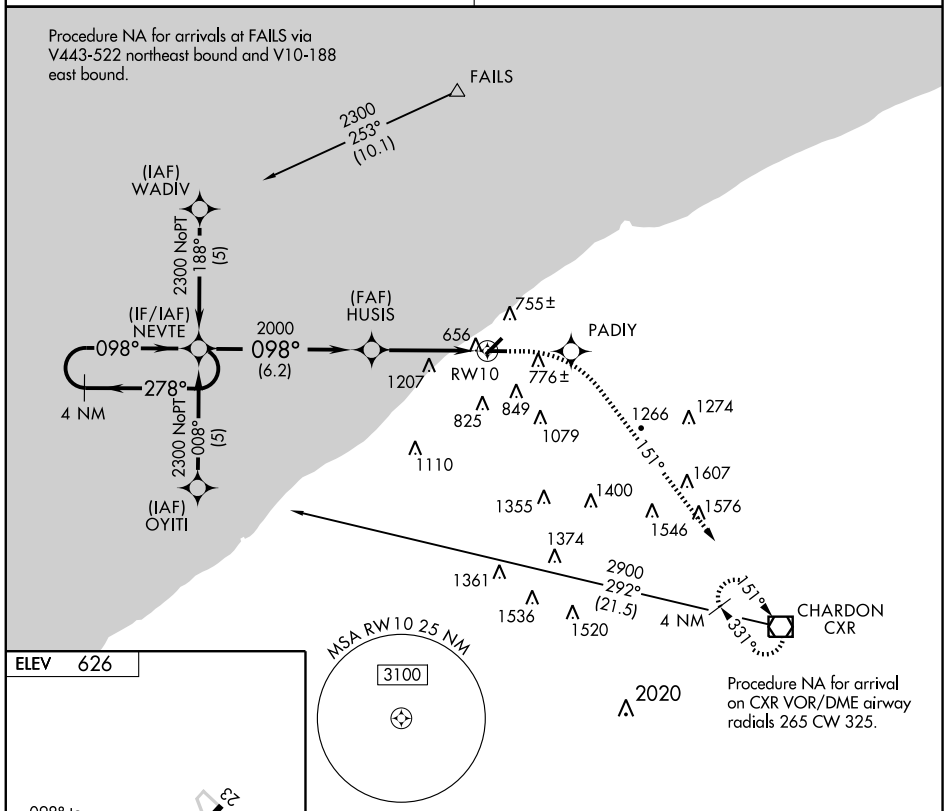
RNAV (GPS) RWY 10
WILLOUGHBY LOST NATION MUNI (LNN)

NA

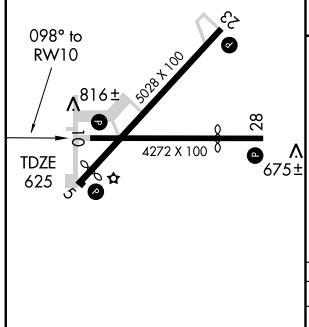
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
Use Burke Lakefront altimeter setting; when not received, use Cleveland-Hopkins Intl altimeter setting and increase all MDA 40 feet, and all visibilities ¼ mile.

MISSED APPROACH: Climb to 2900 direct PADIY and via track 151° to CXR VOR/DME and hold.

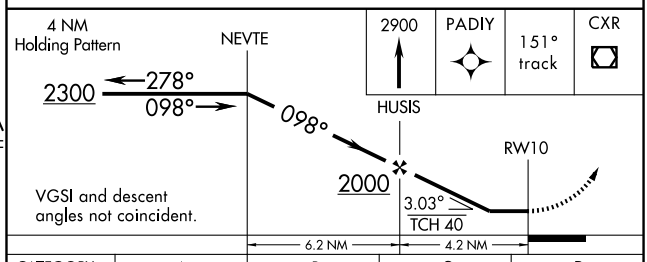
CLEVELAND APP CON	UNICOM
125.35 354.025	122.725 (CTAF) L



ELEV 626



REIL Rwys 5, 10, 23 and 28 L
MIRL Rwys 5-23 and 10-28 L



CATEGORY	A	B	C	D
LNAV MDA	1560-1¼ 935 (1000-1¼)		1560-2¾ 935 (1000-2¾)	NA
CIRCLING	1560-1¼ 934 (1000-1¼)		1560-2¾ 934 (1000-2¾)	NA

WAAS CH 82410 W23A	APP CRS 233°	Rwy ldg 5028 TDZE 623 Apt Elev 626

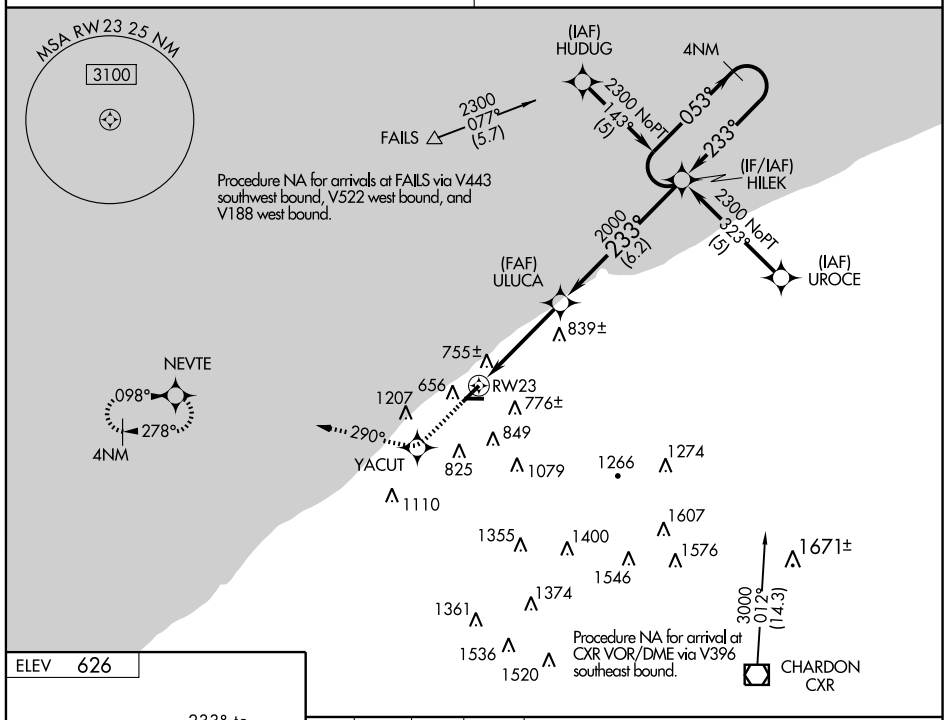
RNAV (GPS) RWY 23
WILLOUGHBY LOST NATION MUNI (LNN)

NA

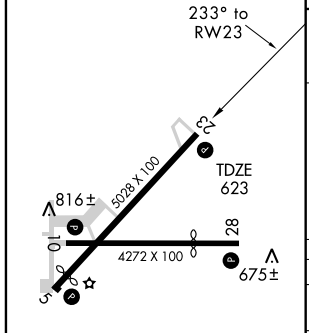
Baro-VNAV NA. DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Use Burke Lakefront altimeter setting; when not received, use Cleveland-Hopkins Intl altimeter setting and increase all DA/MDA 40 feet, and all visibilities ¼ mile.

MISSED APPROACH: Climb to 2300 direct YACUT and via 290° track to NEVTE and hold.

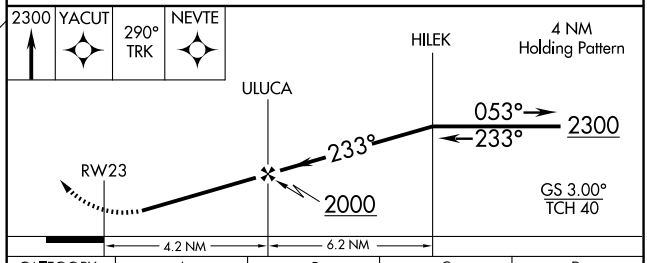
CLEVELAND APP CON	UNICOM
125.35 354.025	122.725 (CTAF) L



ELEV 626



REIL Rwys 5, 10, 23 and 28 L
MIRL Rwys 5-23 and 10-28 L



CATEGORY	A	B	C	D
LPV DA	1031-1½ 408 (500-1½)			NA
LNAV/VNAV DA	1142-1¾ 519 (600-1¾)			NA
LNAV MDA	1200-1 577 (600-1)		1200-1½ 577 (600-1½)	NA
CIRCLING	1200-1 574 (600-1)		1200-1½ 574 (600-1½)	NA

APP CRS	Rwy ldg	3148
279°	TDZE	626
	Apt Elev	626

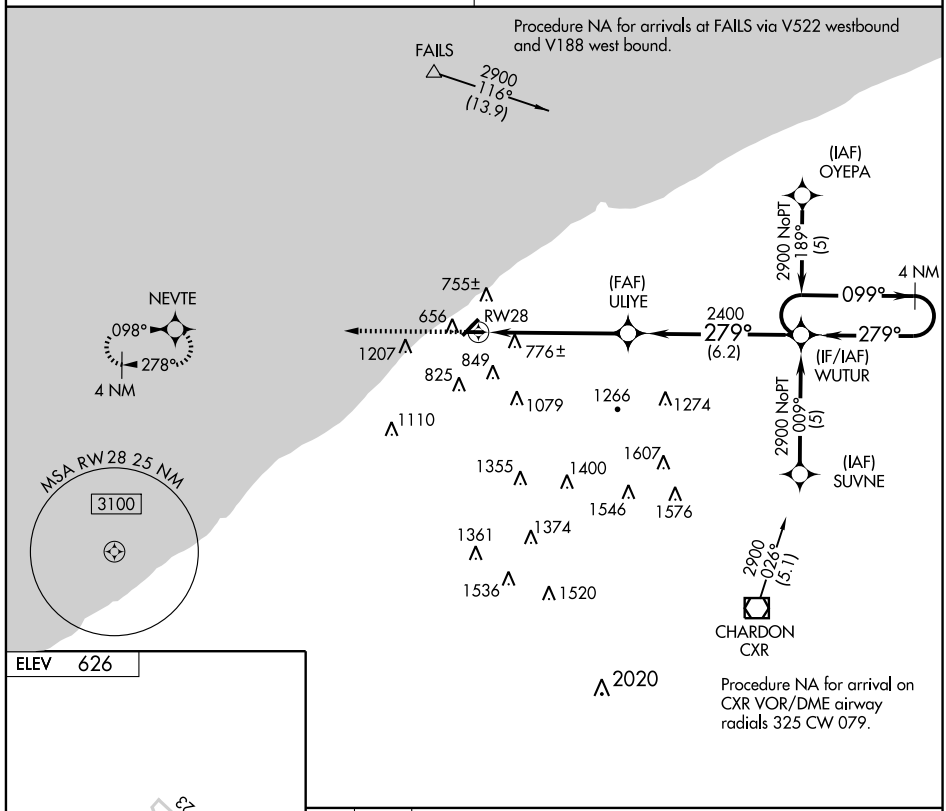
RNAV (GPS) RWY 28
WILLOUGHBY LOST NATION MUNI (LNN)

NA

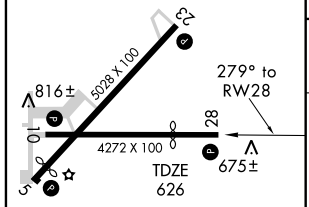
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. Use Burke Lakefront altimeter setting; when not received, use Cleveland-Hopkins Intl altimeter setting and increase all MDA 40 feet, and all visibilities ¼ mile.

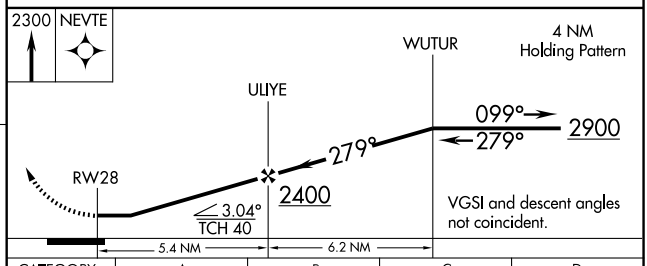
MISSED APPROACH: Climb to 2300 direct NEVTE and hold.

CLEVELAND APP CON	UNICOM
125.35 354.025	122.725 (CTAF) L



ELEV 626





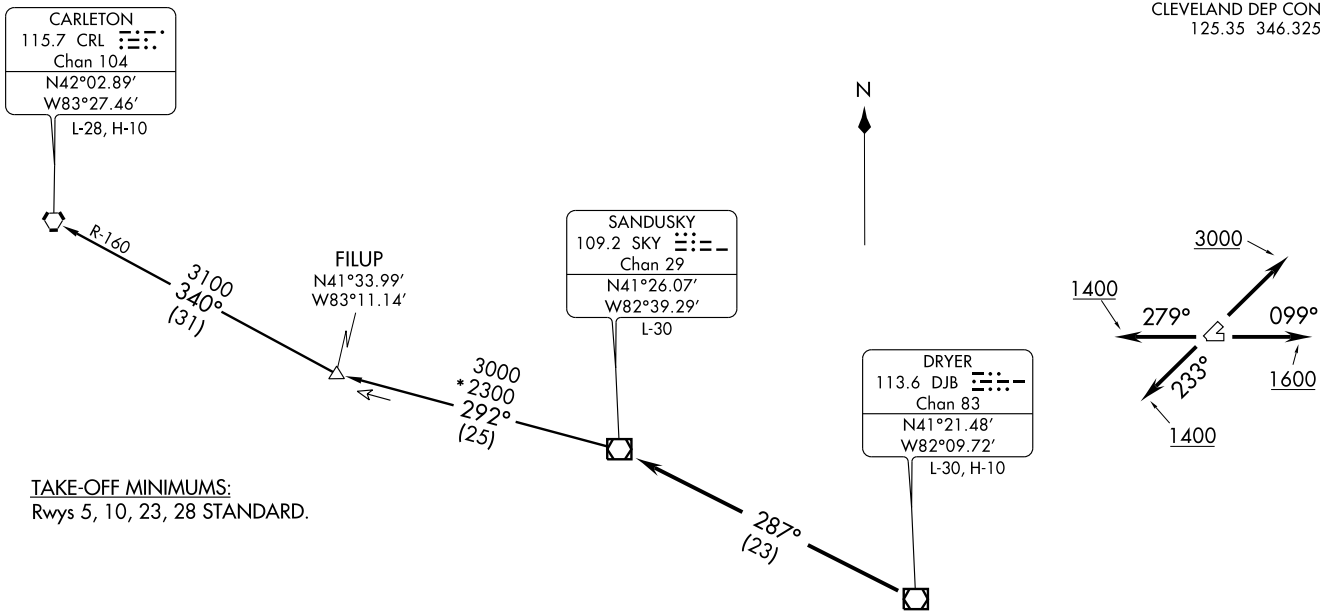
CATEGORY	A	B	C	D
LNAV MDA	1260-1 634 (700-1)		1260-1¾ 634 (700-1¾)	NA
CIRCLING	1260-1 634 (700-1)		1260-1¾ 634 (700-1¾)	NA

REIL Rwys 5, 10, 23 and 28 L
MIRL Rwys 5-23 and 10-28 L

SANDUSKY TWO DEPARTURE

WILLOUGHBY LOST NATION MUNI (LNN)
WILLOUGHBY, OHIO

CLEVELAND DEP CON
125.35 346.325



TAKE-OFF MINIMUMS:
Rwys 5, 10, 23, 28 STANDARD.

TAKE-OFF OBSTACLES:
Rwy 5: Tree 1453′ from DER, 725′ right of centerline, 100′ AGL/724′ MSL.
Bldg 509′ from DER, 429′ right of centerline, 20′ AGL/644′ MSL.
Rwy 10: Pole 663′ from DER, 64′ right of centerline, 52′ AGL/675′ MSL.
Rwy 23: Tree 634′ from DER, 561′ right of centerline, 100′ AGL/724′ MSL.
Stacks 1.8 NM from DER, 1 NM right of centerline, 600′ AGL/1207′ MSL.
Rwy 28: Tree 1336′ from DER, 699′ left of centerline, 100′ AGL/724′ MSL.
Bldg 1101′ from DER, 337′ right of centerline, 35′ AGL/661′ MSL.
Stacks 2.1 NM from DER, 4444′ left of centerline, 600′ AGL/1207′ MSL.

NOTE: RADAR required
NOTE: Turboprop aircraft only

NOTE: Chart not to scale.

SANDUSKY TWO DEPARTURE

DEPARTURE ROUTE DESCRIPTION

TAKE-OFF RUNWAY 5: Climb via assigned heading to 3000 thence. . . .
TAKE-OFF RUNWAY 10: Climb via heading 099° to 1600 then via assigned heading to 3000, thence. . . .
TAKE-OFF RUNWAY 23: Climb via heading 233° to 1400 then via assigned heading to 3000, thence. . . .
TAKE-OFF RUNWAY 28: Climb via heading 279° to 1400 then via assigned heading to 3000, thence. . . .

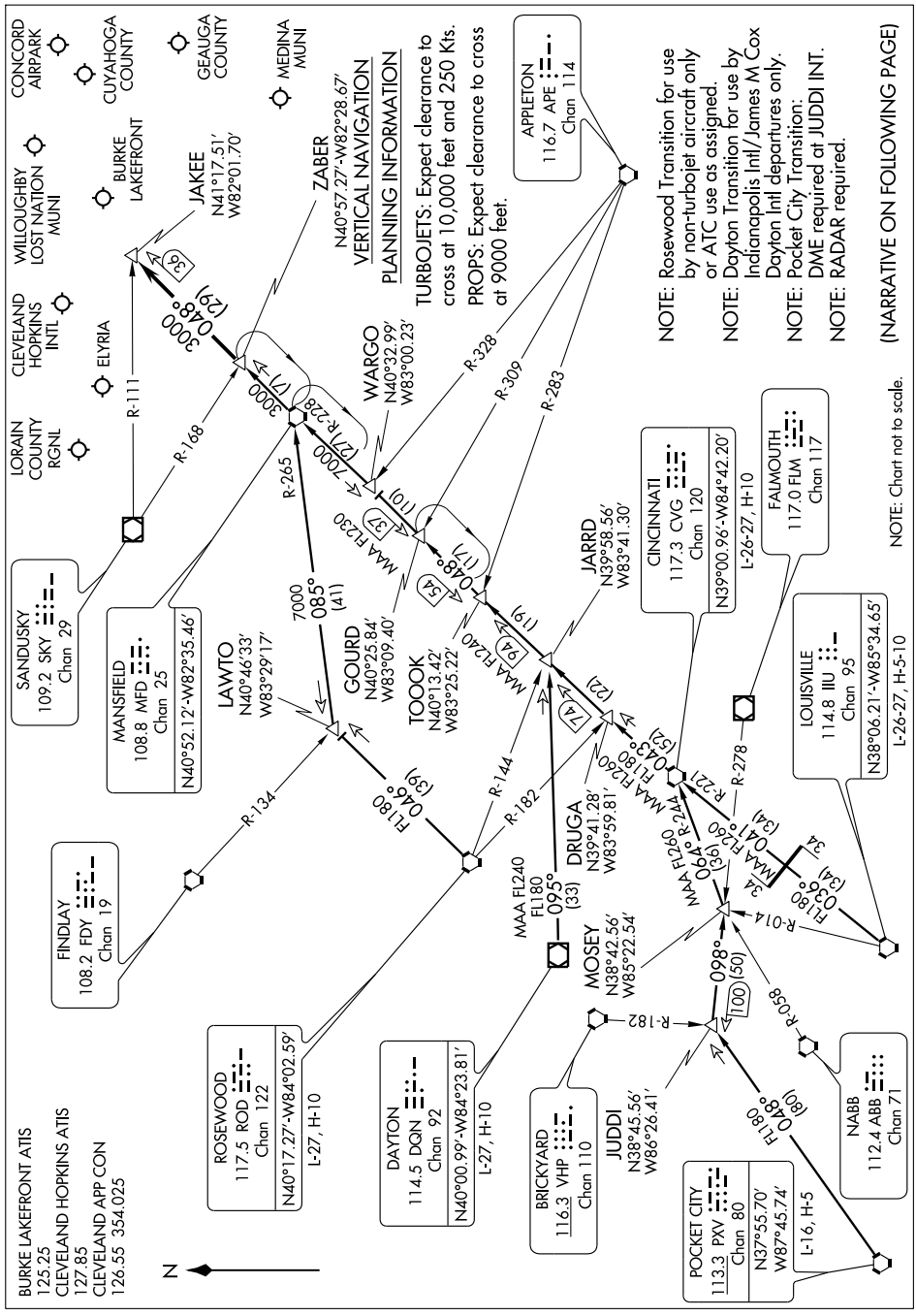
. . . . or assigned altitude for vectors to intercept the DJB VOR/DME R-287 to SKY VOR/DME. Expect filed altitude/flight level ten (10) minutes after departure.

CARLETON TRANSITION (SKY2.CRL): From over SKY VOR/DME via SKY R-292 to FILUP INT, then via CRL R-160 to CRL VORTAC.

ZABER ONE ARRIVAL

ST-84 (FAA)

CLEVELAND, OHIO



ARRIVAL ROUTE DESCRIPTION

CINCINNATI TRANSITION (CVG.ZABER1): From over CVG VORTAC via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

DAYTON TRANSITION (DQN.ZABER1): (For use by INDIANAPOLIS INTL/JAMES M COX DAYTON INTL departures only). From over DQN VOR/DME via DQN R-095 to JARRD INT, then via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

LOUISVILLE TRANSITION (IIU.ZABER1): From over IIU VORTAC via IIU R-036 and CVG R-221 to CVG VORTAC, then via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

POCKET CITY TRANSITION (PXV.ZABER1): (DME REQUIRED at JUDDI INT) From over PXV VORTAC via PXV R-048 to JUDDI INT, then via FLM R-278 to MOSEY INT, then via CVG R-244 to CVG VORTAC, then via CVG R-043 to TOOOK INT, then via MFD R-228 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

ROSEWOOD TRANSITION (ROD.ZABER1): (For use by non-turbo aircraft only or ATC use as assigned). From over ROD VORTAC via ROD R-046 to LAWTO INT, then via MFD R-265 to MFD VORTAC, then via MFD R-048 to ZABER INT. Thence. . . .

. . . . From over ZABER INT via MFD R-048 to JAKEE INT. Expect radar vectors to final approach course.

EC-2, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	3579
033°	TDZE	1033
	Apt Elev	1033

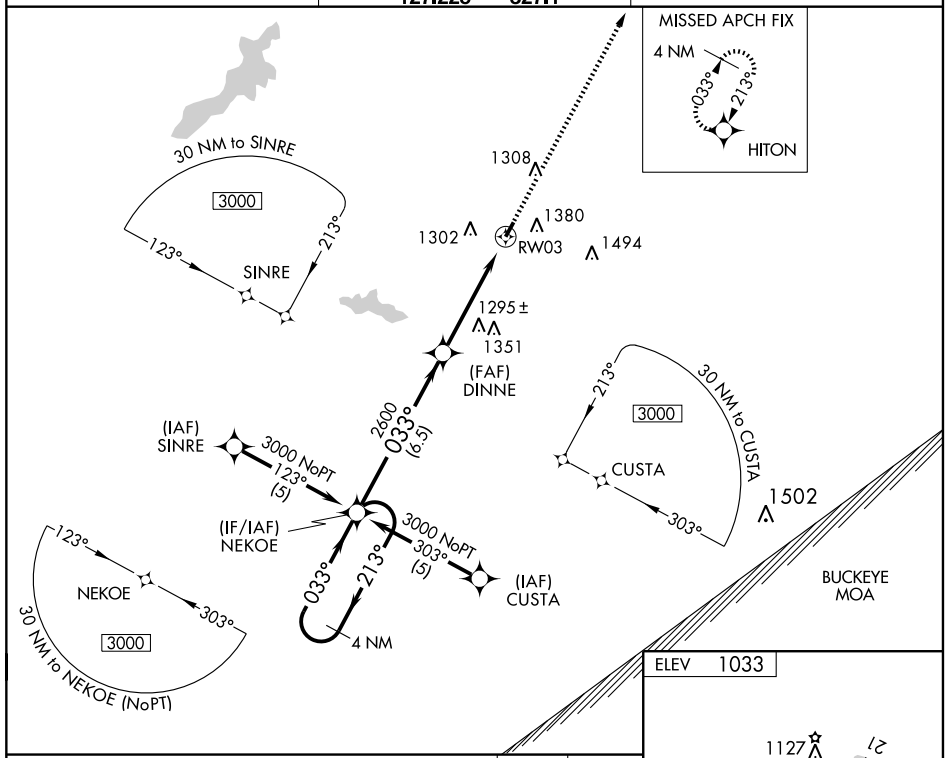
RNAV (GPS) RWY 3
WILMINGTON/CLINTON FIELD (I66)

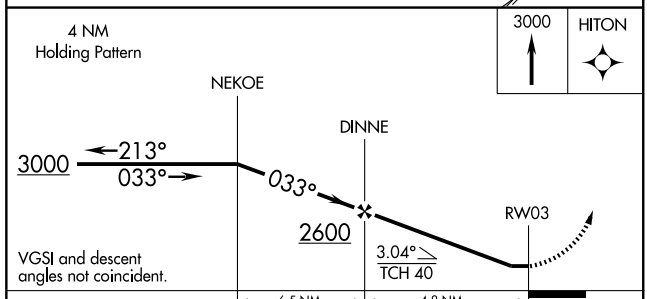
NA

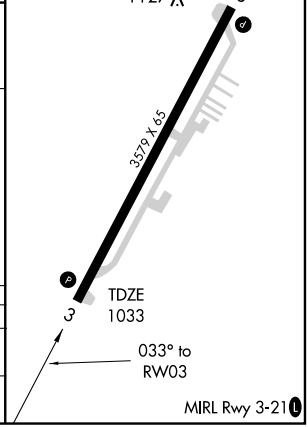
If local altimeter setting not received, use Wilmington/Airborne Airpark altimeter setting and increase all MDAs 20 feet. DME/DME RNP-0.3 NA. Procedure NA at night. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 3000 direct HITON and hold.

AWOS-3	DAYTON APP CON		UNICOM
124.175	118.85	126.5	123.0 (CTAF)
	127.225	327.1	







CATEGORY	A	B	C	D
LNAV MDA	1600-1 567 (600-1)		1600-1½ 567 (600-1½)	NA
CIRCLING	1740-1 707 (800-1)		1740-2 707 (800-2)	NA

WAAS CH 99608 W21A	APP CRS 213°	Rwy ldg 3579 TDZE 1033 Apt Elev 1033

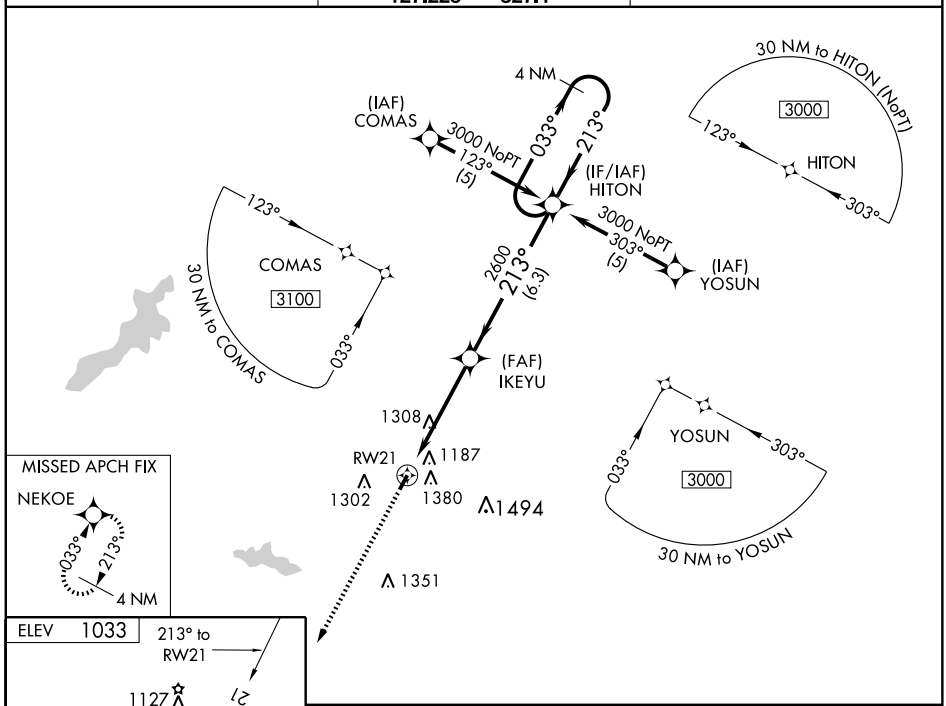
RNAV (GPS) RWY 21
WILMINGTON/CLINTON FIELD (I66)

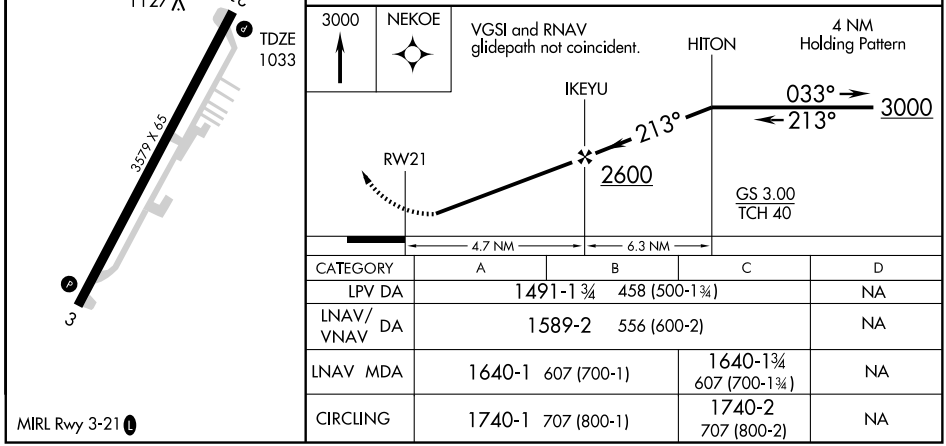
NA

Baro-VNAV NA when using Wilmington/Airborne Airpark altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 54°C (130°F). DME/DME RNP -0.3 NA. When local altimeter setting not received, use Wilmington/Airborne Airpark altimeter setting and increase all DA/MDA 20 feet. Visibility reduction by helicopters NA.

MISSED APPROACH: Climb to 3000 direct NEKOE and hold.

AWOS-3	DAYTON APP CON	UNICOM
124.175	118.85 126.5 127.225 327.1	123.0 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1491-1¾ 458 (500-1¾)			NA
LNAV/VNAV DA	1589-2 556 (600-2)			NA
LNAV MDA	1640-1 607 (700-1)		1640-1¾ 607 (700-1¾)	NA
CIRCLING	1740-1 707 (800-1)		1740-2 707 (800-2)	NA

MIRL Rwy 3-21 L

VOR/DME MXQ 112.9 Chan 76	APP CRS 331°	Rwy ldg N/A TDZE N/A Apt Elev 1033

VOR-A

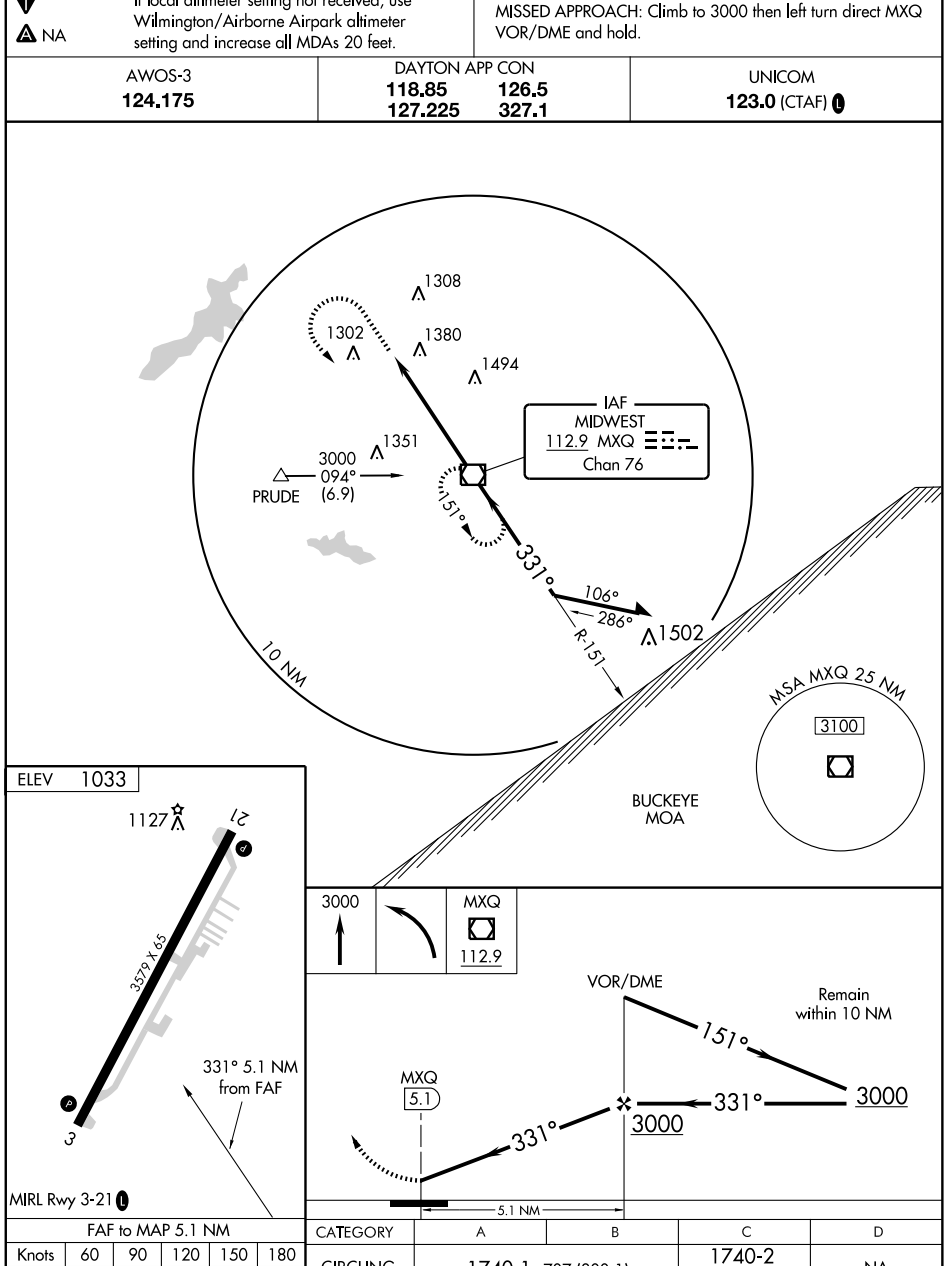
WILMINGTON/CLINTON FIELD (I66)

NA

If local altimeter setting not received, use Wilmington/Airborne Airpark altimeter setting and increase all MDAs 20 feet.

MISSED APPROACH: Climb to 3000 then left turn direct MXQ VOR/DME and hold.

AWOS-3	DAYTON APP CON	UNICOM
124.175	118.85 126.5 127.225 327.1	123.0 (CTAF)



FAF to MAP 5.1 NM					
Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

CATEGORY	A	B	C	D
CIRCLING	1740-1 707 (800-1)		1740-2 707 (800-2)	NA

EC-2, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-IYV 109.35 Chan 30 (Y)	APP CRS 041°	Rwy ldg 9000 TDZE 1046 Apt Elev 1077

ILS or LOC RWY 4R

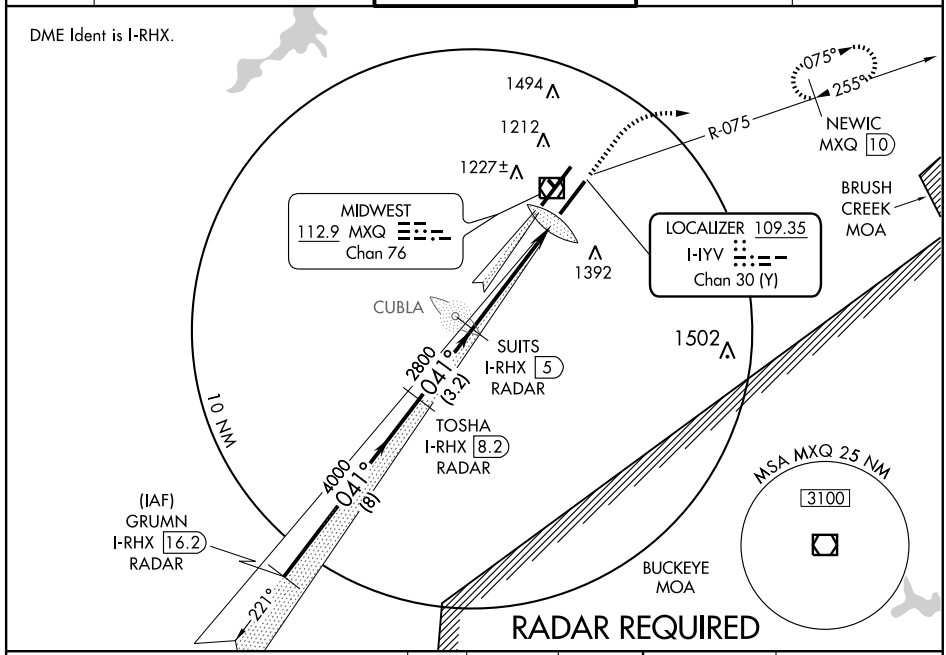
WILMINGTON/AIRBORNE AIRPARK (ILN)

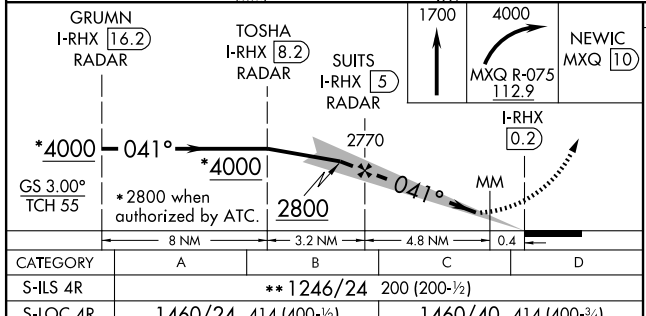
Obtain local altimeter setting on CTAF; when not received, use Dayton Intl altimeter setting. Obtain approach lights and rwy lights on CTAF. Simultanous approach authorized with Rwy 4L. ** RVR 1800 authorized with the use of FD or AP or HUD to DA.

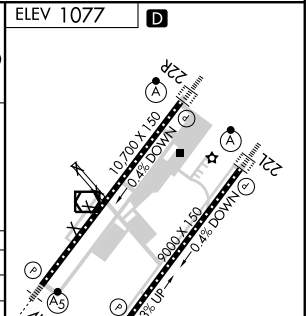
MALSR A-5

MISSED APPROACH: Climb to 1700, then climbing right turn to 4000 via MXQ R-075 to NEWIC/MXQ 10 DME and hold.

ATIS	DAYTON APP CON	WILMINGTON TOWER *	GND CON	CLNC DEL
124.925	126.5 327.1	119.475 (CTAF)	121.6	125.6







CATEGORY	A	B	C	D
S-ILS 4R	** 1246/24 200 (200-½)			
S-LOC 4R	1460/24 414 (400-½)		1460/40 414 (400-¾)	
CIRCLING	1640-1 563 (600-1)		1640-1½ 563 (600-1½)	1680-2 603 (700-2)
DAYTON INTL ALTIMETER SETTING MINIMUMS				
S-ILS 4R	1336-½ 290 (300-½)			
S-LOC 4R	1560-½ 514 (500-½)		1560-1 514 (500-1)	1560-1¼ 514 (500-1¼)
CIRCLING	1740-1 663 (700-1)		1740-1¾ 663 (700-1¾)	1780-2¼ 703 (800-2¼)

FAF to MAP 5.2 NM

Knots	60	90	120	150	180
Min:Sec	5:12	3:28	2:36	2:05	1:44

EC-2, 14 JAN 2010 to 11 FEB 2010

LOC I-ILN	APP CRS	Rwy ldg	10700
110.7	221°	TDZE	1077
		Apt Elev	1077

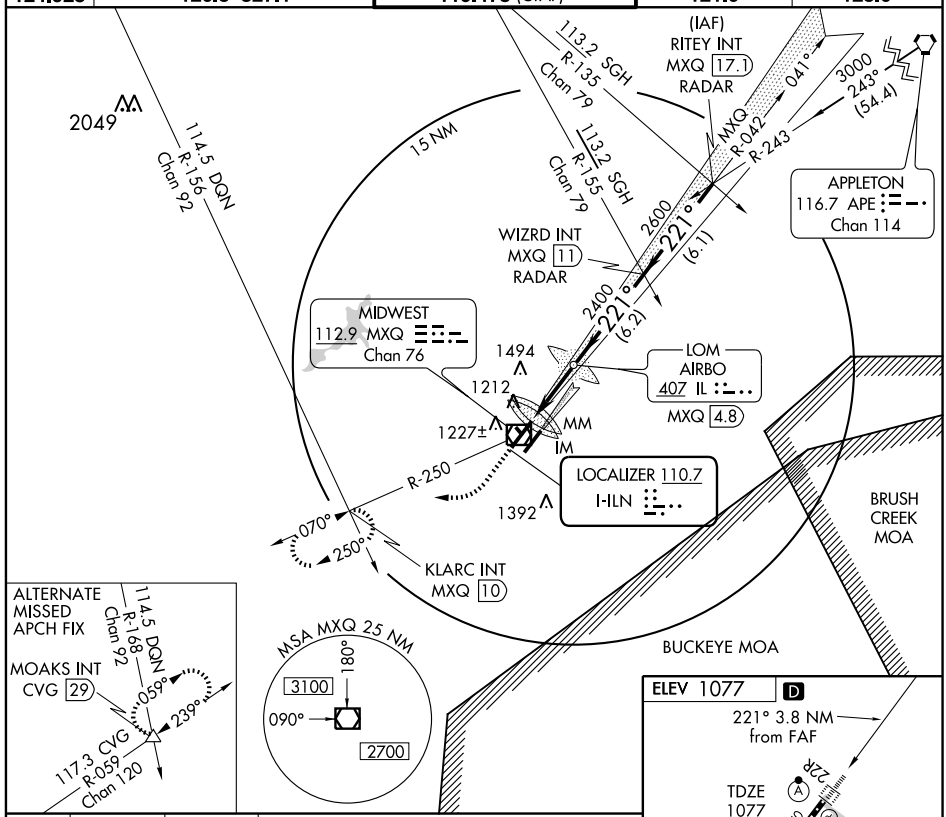
ILS or LOC RWY 22R
WILMINGTON/AIRBORNE AIRPARK (ILN)

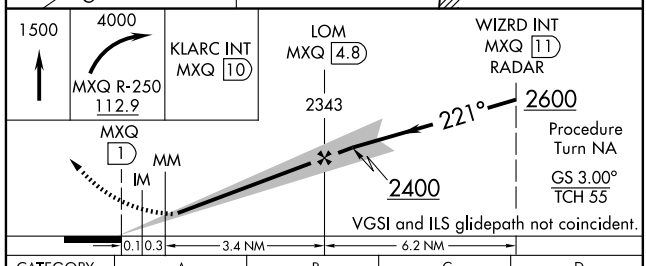
Simultaneous approaches authorized with ILS RWY 22L.
DME from MXQ VOR/DME

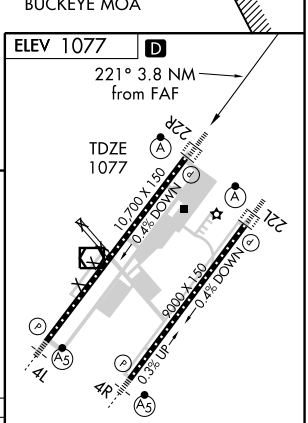
ALSF-2

MISSED APPROACH: Climb to 1500, then climbing right turn to 4000 via MXQ R-250 to KLARC Int/MXQ 10 DME and hold.

ATIS	DAYTON APP CON	WILMINGTON TOWER ★	GND CON	CLNC DEL
124.925	126.5 327.1	119.475 (CTAF)	121.6	125.6







TDZ/CL Rwys 22L and 22R
HIRL Rwys 4R-22L and 4L-22R

CATEGORY	A	B	C	D
S-ILS 22R	1277/18 200 (200-½)			
S-LOC 22R	1400/24 323 (400-½)			1400/40 323 (400-¾)
CIRCLING	1640-1 563 (600-1)		1640-1½ 563 (600-1½)	1640-2 563 (600-2)

FAF to MAP 3.8 NM

Knots	60	90	120	150	180
Min:Sec	3:48	2:32	1:54	1:31	1:16

EC-2, 14 JAN 2010 to 11 FEB 2010

LOC I-HWM	APP CRS	Rwy ldg	10700
110.7	041°	TDZE	1057
		Apt Elev	1077

ILS RWY 4L

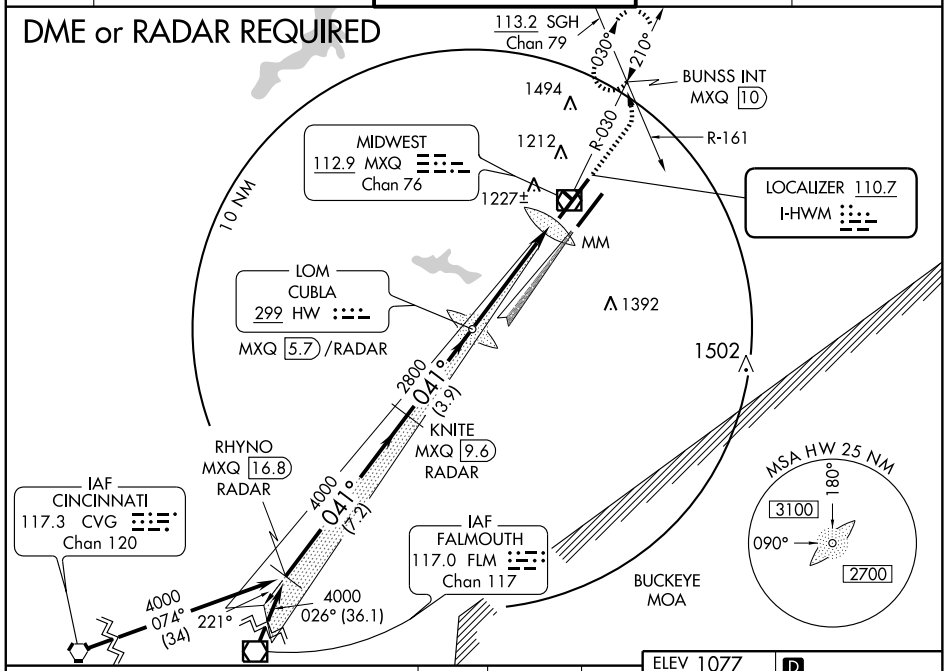
WILMINGTON/ AIRBORNE AIRPARK (ILN)

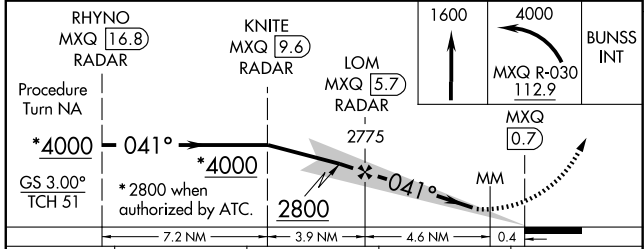
Obtain local altimeter setting on CTAF; when not received, use Dayton Intl altimeter setting. Obtain approach lights and runway lights on CTAF. Simultaneous approaches authorized with Rwy 4R. Use MXQ DME when on LOC course.

MALSR

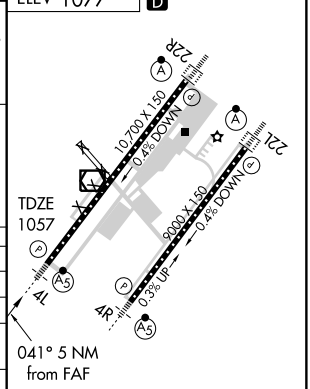
MISSED APPROACH: Climb to 1600 then climbing left turn to 4000 via MXQ R-030 to BUNSS Int/MXQ 10 DME and hold.

ATIS	DAYTON APP CON	WILMINGTON TOWER ★	GND CON	CLNC DEL
124.925	126.5 327.1	119.475 (CTAF)	121.6	125.6





CATEGORY	A	B	C	D
S-ILS 4L	1257/24 200 (200-½)			
S-LOC 4L	1460/24 403 (400-½)		1460/40 403 (400-¾)	
CIRCLING	1640-1 563 (600-1)		1640-1½ 563 (600-1½)	1680-2 603 (700-2)
DAYTON INTL ALTIMETER SETTING MINIMUMS				
S-ILS 4L	1347-½ 290 (300-½)			
S-LOC 4L	1560-½ 503 (500-½)		1560-1 503 (500-1)	1560-1¼ 503 (500-1¼)
CIRCLING	1740-1 663 (700-1)		1740-1¾ 663 (700-1¾)	1780-2¼ 703 (800-2¼)



TDZ/CL Rwys 22L and 22R
HIRL Rwys 4R-22L and 4L-22R

FAF to MAP 5 NM					
Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

EC-2. 14 JAN 2010 to 11 FEB 2010

LOC/DME I-RHX	APP CRS	Rwy ldg 9000
109.35	221°	TDZE 1077
Chan 30 (Y)		Apt Elev 1077

ILS RWY 22L

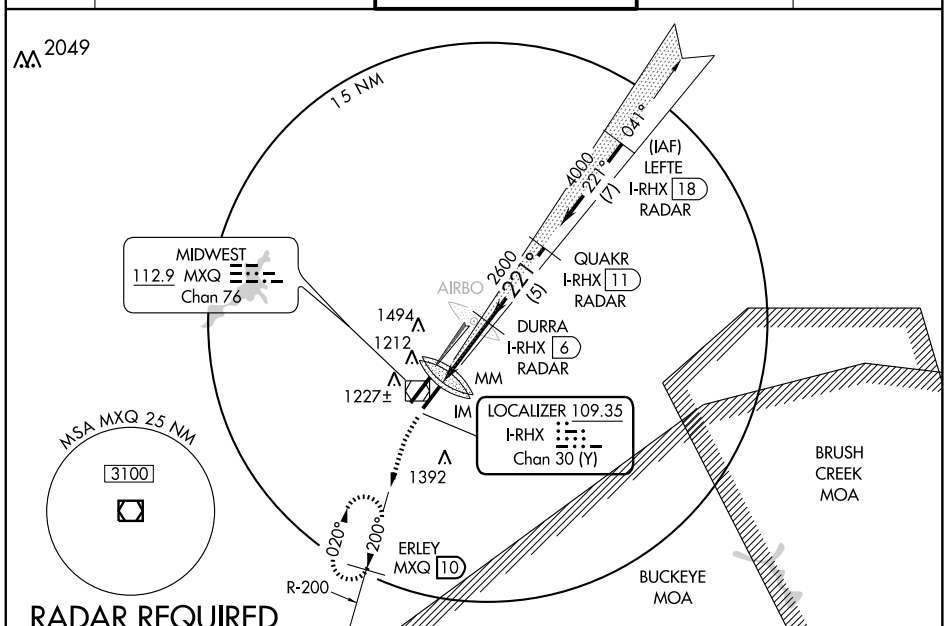
WILMINGTON/AIRBORNE AIRPARK (ILN)

Obtain local altimeter setting on CTAF; when not received, use Dayton Intl altimeter setting.
Obtain approach lights and rwy lights on CTAF.
Simultaneous approaches authorized with Rwy 22R.

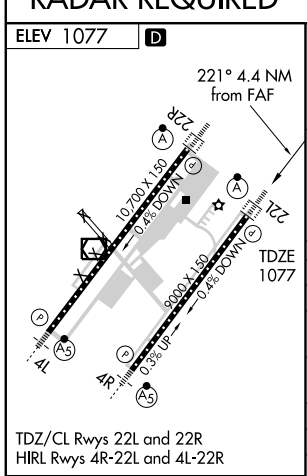
ALSF2

MISSED APPROACH: Climb to 1500, then climbing left turn to 4000 via MXQ R-200 to ERLEY/MXQ 10 DME and hold.

ATIS	DAYTON APP CON	WILMINGTON TOWER ★	GND CON	CLNC DEL
124.925	126.5 327.1	119.475 (CTAF)	121.6	125.6

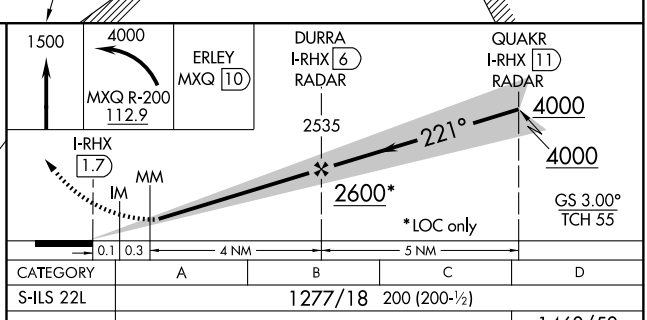


ELEV 1077 D



TDZ/CL Rwys 22L and 22R
HIRL Rwys 4R-22L and 4L-22R

FAF to MAP 4.4 NM				
Knots	60	90	120	150	180
Min:Sec	4:24	2:56	2:12	1:46	1:28



CATEGORY	A	B	C	D
S-ILS 22L	1277/18 200 (200-½)			
S-LOC 22L	1460/24 383 (400-½)			1460/50 383 (400-1)
CIRCLING	1640-1 563 (600-1)		1640-1½ 563 (600-1½)	1680-2 603 (700-2)
DAYTON INTL ALTIMETER SETTING MINIMUMS				
S-ILS 22L	1367-½ 290 (300-½)			
S-LOC 22L	1540-½ 463 (500-½)		1540-¾ 463 (500-¾)	1540-1 463 (500-1)
CIRCLING	1740-1 663 (700-1)		1740-1¾ 663 (700-1¾)	1780-2¼ 703 (800-2¼)

EC-2, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-RHX 109.35 Chan 30 (Y)	APP CRS 221°	Rwy ldg 9000 TDZE 1077 Apt Elev 1077

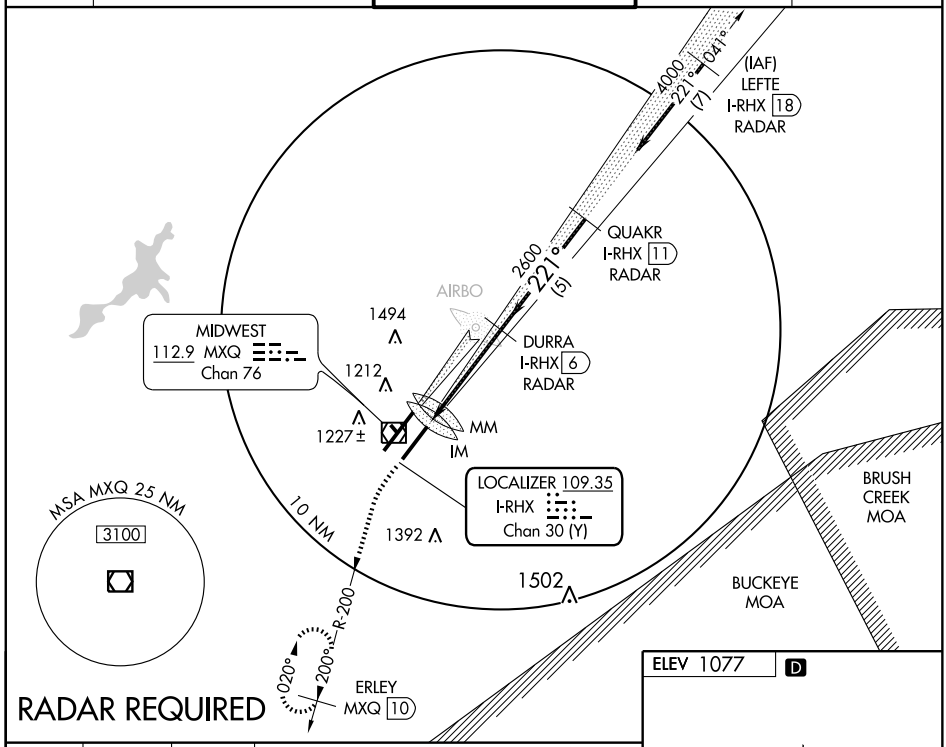
ILS RWY 22L (CAT II)
WILMINGTON/AIRBORNE AIRPARK (ILN)

Obtain approach lights and rwy lights on CTAF.
Simultaneous approaches authorized with Rwy 22R.

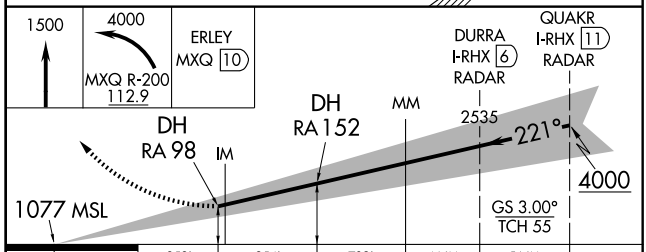
ALSF2

MISSED APPROACH: Climb to 1500, then climbing left turn to 4000 via MXQ R-200 to ERLEY/MXQ 10 DME and hold.

ATIS	DAYTON APP CON	WILMINGTON TOWER ★	GND CON	CLNC DEL
124.925	126.5 327.1	119.475 (CTAF)	121.6	125.6



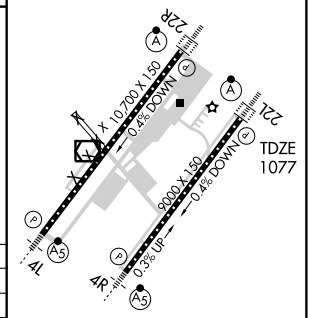
RADAR REQUIRED



CATEGORY	A	B	C	D
S-ILS 22L	RA 152/16 150 DA 1227			
S-ILS 22L	RA 98/12 100 DA 1177			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

ELEV 1077 D



TDZ/CL Rwys 22L and 22R
HIRL Rwys 4R-22L and 4L-22R

EC-2, 14 JAN 2010 to 11 FEB 2010

LOC I-ILN	APP CRS	Rwy ldg	10700
110.7	221°	TDZE	1077
		Apt Elev	1077

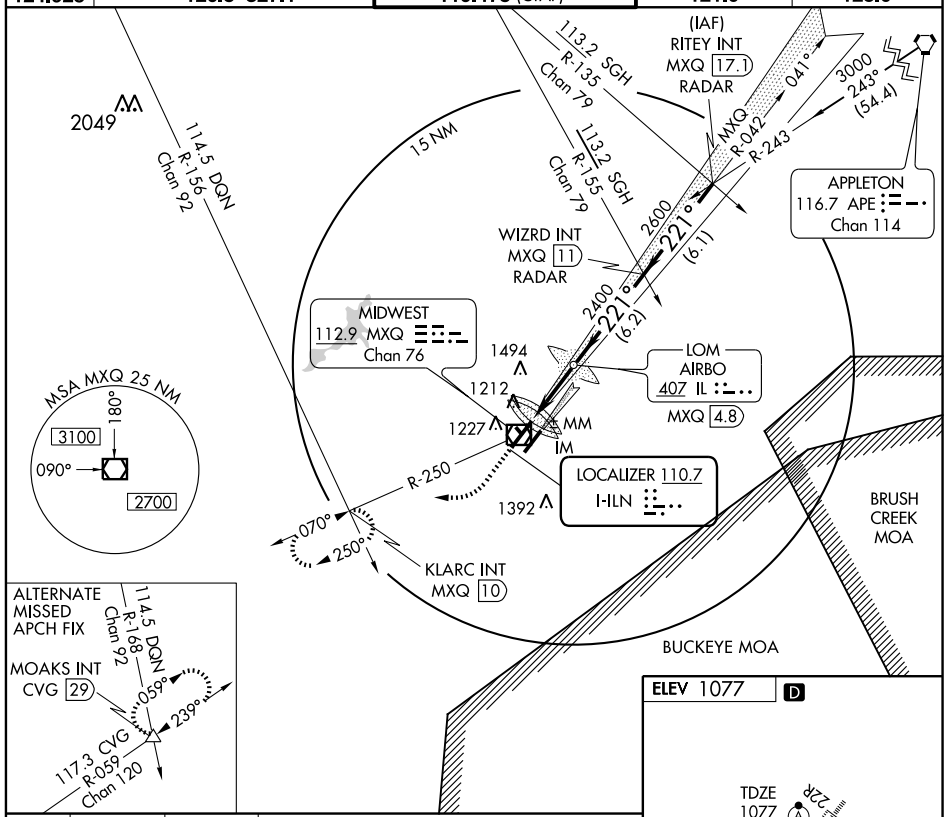
ILS RWY 22R (CAT II)
WILMINGTON/AIRBORNE AIRPARK (ILN)

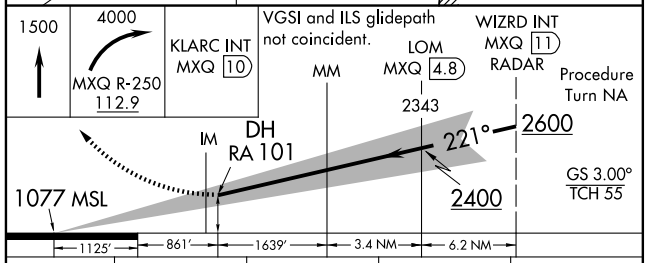
Simultaneous approaches authorized with ILS RWY 22L.
DME from MXQ VOR/DME

ALSF-2

MISSED APPROACH: Climb to 1500, then climbing right turn to 4000 via MXQ R-250 to KLARC Int/MXQ 10 DME and hold.

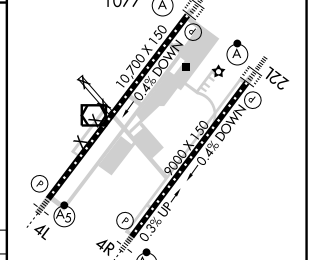
ATIS	DAYTON APP CON	WILMINGTON TOWER ★	GND CON	CLNC DEL
124.925	126.5 327.1	119.475 (CTAF)	121.6	125.6





CATEGORY	A	B	C	D
S-ILS 22R	RA 101/12 100 DA 1177			

CATEGORY II ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED



TDZ/CL Rwys 22L and 22R
HIRL Rwys 4R-22L and 4L-22R

EC-2, 14 JAN 2010 to 11 FEB 2010

LOC I-ILN	APP CRS	Rwy ldg	10700
110.7	221°	TDZE	1077
		Apt Elev	1077

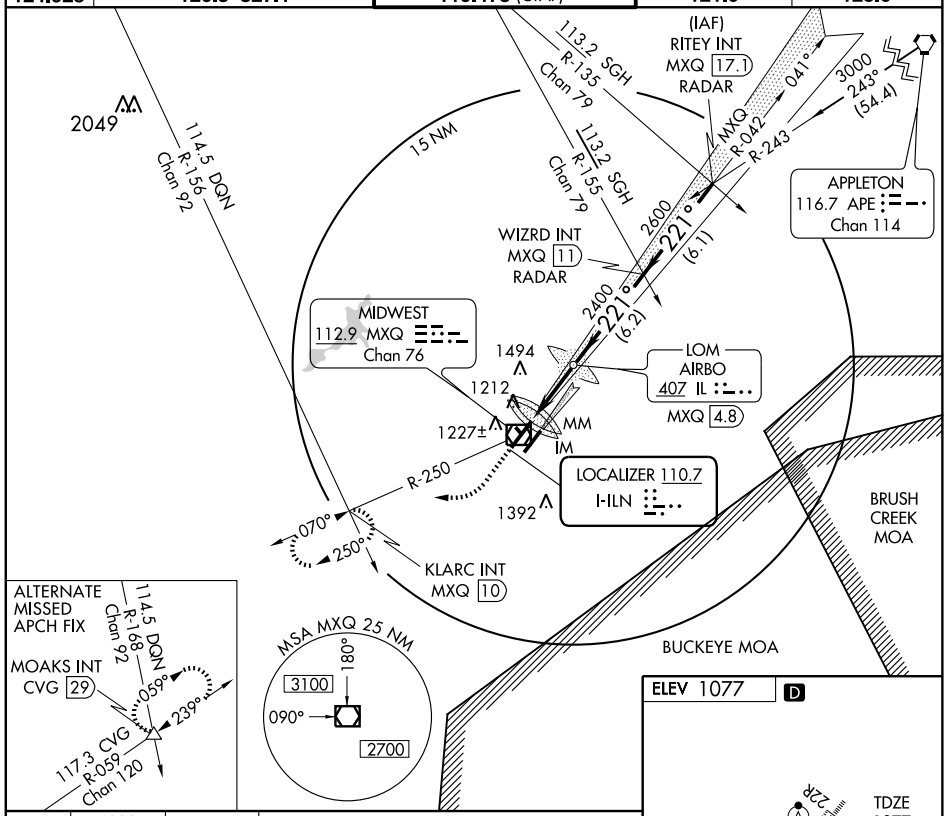
ILS RWY 22R (CAT III)
WILMINGTON/AIRBORNE AIRPARK (ILN)

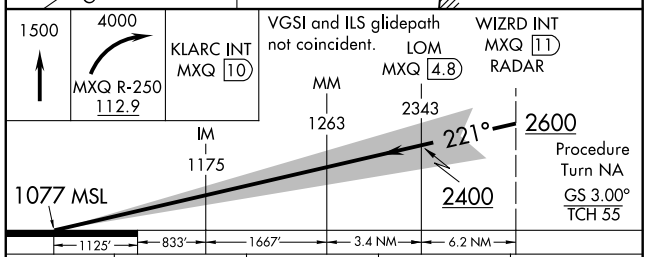
Simultaneous approaches authorized with ILS RWY 22L.
DME from MXQ VOR/DME

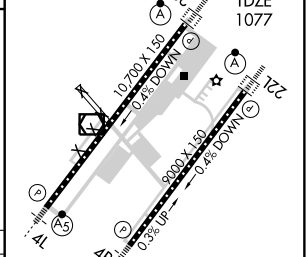
ALSF-2

MISSED APPROACH: Climb to 1500, then climbing right turn to 4000 via MXQ R-250 to KLARC Int/MXQ 10 DME and hold.

ATIS	DAYTON APP CON	WILMINGTON TOWER ★	GND CON	CLNC DEL
124.925	126.5 327.1	119.475 (CTAF)	121.6	125.6







CATEGORY	A	B	C	D
S-ILS 22R		CAT IIIa	RVR 07	
S-ILS 22R		CAT IIIb	RVR 06	
S-ILS 22R		CAT IIIc	NA	

CATEGORY III ILS - SPECIAL AIRCREW & AIRCRAFT CERTIFICATION REQUIRED

TDZ/CL Rwys 22L and 22R
HIRL Rwys 4R-22L and 4L-22R

EC-2, 14 JAN 2010 to 11 FEB 2010

LOM HW	APP CRS	Rwy ldg	10700
299	042°	TDZE	1057
		Apt Elev	1077

NDB RWY 4L

WILMINGTON/ AIRBORNE AIRPARK (ILN)

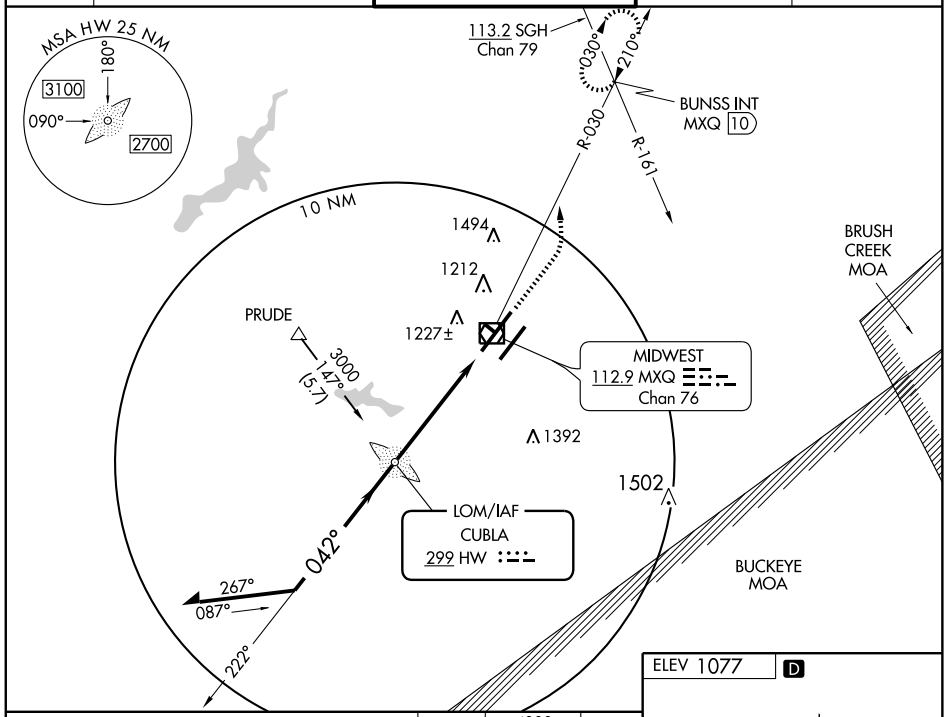
T
A NA

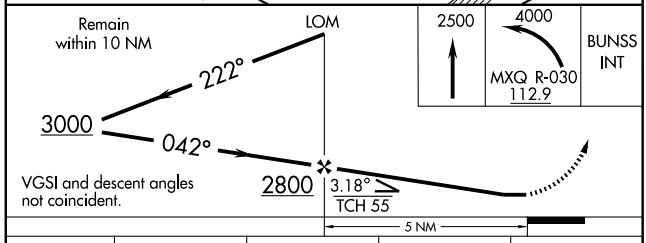
Obtain local altimeter setting on CTAF; when not received, use Dayton Intl altimeter setting. Obtain HIRL Rwy 4L-22R, MALSR Rwy 4L and ALSF-2 Rwy 22R on CTAF.

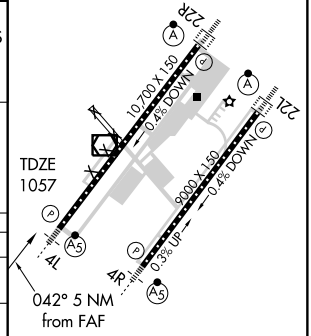
MALSR A5

MISSED APPROACH: Climb to 2500 then climbing left turn to 4000 via MXQ R-030 to BUNSS Int/10 DME and hold.

ATIS	DAYTON APP CON	WILMINGTON TOWER ★	GND CON	CLNC DEL
124.925	126.5 327.1	119.475 (CTAF)	121.6	125.6







TDZ/CL Rwys 22L and 22R
HIRL Rwys 4R-22L and 4L-22R

CATEGORY	A	B	C	D
S-4L	1520/40 463 (500-¾)			1520/60 463 (500-1¼)
CIRCLING	1640-1 563 (600-1)		1640-1½ 563 (600-1½)	1680-2 603 (700-2)
DAYTON INTL ALTIMETER SETTING MINIMUMS				
S-4L	1600-¾ 543 (600-¾)		1600-1 543 (600-1)	1600-1½ 543 (600-1½)
CIRCLING	1740-1 663 (700-1)		1740-1¾ 663 (700-1¾)	1780-2¼ 703 (800-2¼)

FAF to MAP 5 NM

Knots	60	90	120	150	180
Min:Sec	5:00	3:20	2:30	2:00	1:40

EC-2. 14 JAN 2010 to 11 FEB 2010

LOM IL	APP CRS	Rwy ldg	10700
407	221°	TDZE	1077
		Apt Elev	1077

NDB RWY 22R

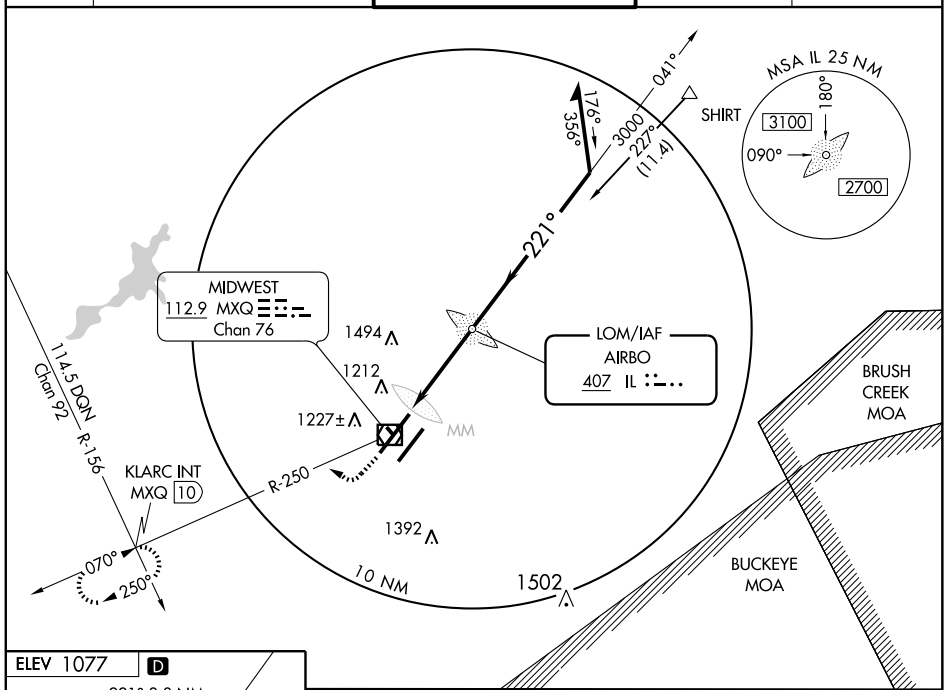
WILMINGTON/AIRBORNE AIRPARK (ILN)

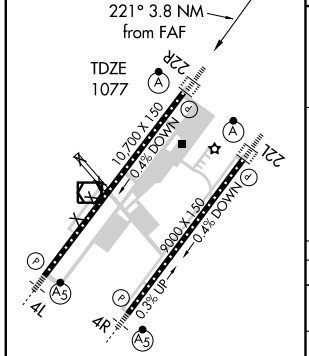
T NA — Obtain local altimeter setting on CTAF; when not received, use Dayton Intl altimeter setting. Obtain HIRL Rwy 4L-22R, MALSR Rwy 4L and ALSF-2 Rwy 22R on CTAF.

ALSF-2

MISSED APPROACH: Climb to 2500 then climbing right turn to 4000 via MXQ R-250 to KLARC Int/MXQ 10 DME and hold.

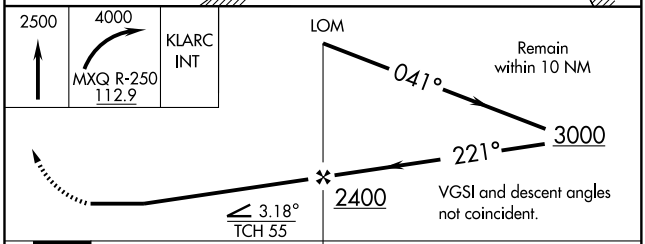
ATIS	DAYTON APP CON	WILMINGTON TOWER ★	GND CON	CLNC DEL
124.925	126.5 327.1	119.475 (CTAF)	121.6	125.6





TDZ/CL Rwys 22L and 22R
HIRL Rwys 4R-22L and 4L-22R

FAF to MAP 3.8 NM					
Knots	60	90	120	150	180
Min:Sec	3:48	2:32	1:54	1:31	1:16



CATEGORY	A	B	C	D
S-22R	1580/40 503 (600-¾)		1580/50 503 (600-1)	1580/60 503 (600-1¼)
CIRCLING	1640-1 563 (600-1)		1640-1½ 563 (600-1½)	1680-2 603 (700-2)
DAYTON INTL ALTIMETER SETTING MINIMUMS				
S-22R	1660-¾ 583 (600-¾)		1660-1 583 (600-1)	1660-1½ 583 (600-1½)
CIRCLING	1740-1 663 (700-1)		1740-1¾ 663 (700-1¾)	1780-2¼ 703 (800-2¼)

EC-2, 14 JAN 2010 to 11 FEB 2010

WAAS CH 62914 W04A	APP CRS 041°	Rwy ldg 10700 TDZE 1057 Apt Elev 1077

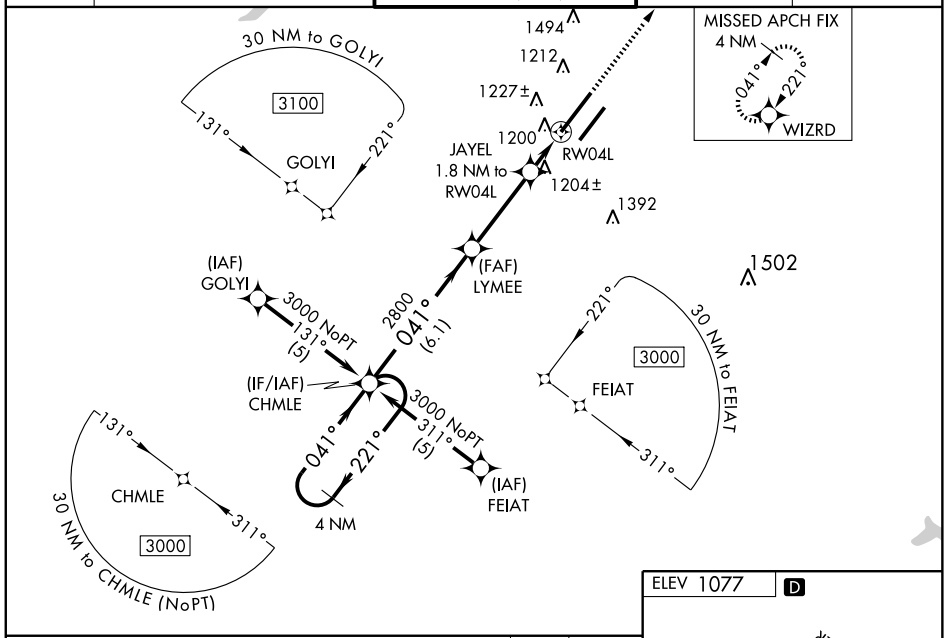
RNAV (GPS) RWY 4L
WILMINGTON/ AIRBORNE AIRPARK (ILN)

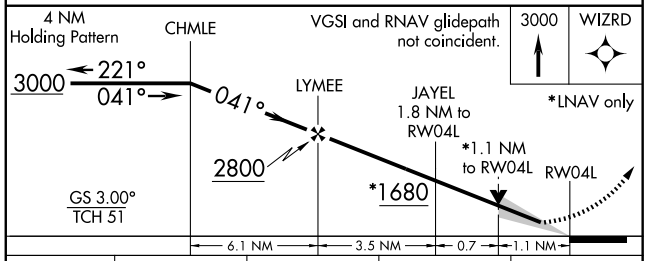
For inoperative MALSR when using James M. Cox Dayton Intl altimeter setting, increase LPV visibility to RVR 5000 all Cats. For inoperative MALSR, increase LNAV Cat D visibility to RVR 6000. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA.When local altimeter not received, use James M. Cox Dayton Intl altimeter setting and increase all DA 90 feet and all MDA 100 feet. Increase LNAV/VNAV all Cats visibility ½ mile, LNAV Cat C and Circling Cat C/D visibility ¼ mile. VDP and Baro-VNAV NA when using James M. Cox Dayton Intl altimeter setting.

MALSR

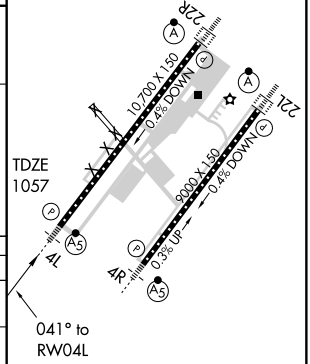
MISSED APPROACH: Climb to 3000 direct WIZRD and hold.

ATIS	DAYTON APP CON	WILMINGTON TOWER ★	GND CON	CLNC DEL
124.925	126.5 327.1	119.475 (CTAF)	121.6	125.6





CATEGORY	A	B	C	D
LPV DA	1257/24 200 (200-½)			
LNAV/VNAV DA	1505/50 448 (500-1)			
LNAV MDA	1460/24 403 (400-½)		1460/40 403 (400-¾)	1460/50 403 (400-1)
CIRCLING	1640-1 563 (600-1)		1640-1½ 563 (600-1½)	1680-2 603 (700-2)



TDZ/CL Rwys 22L and 22R
HIRL Rwys 4R-22L and 4L-22R

WAAS CH 40214 W22A	APP CRS 221°	Rwy ldg 10700 TDZE 1077 Apt Elev 1077

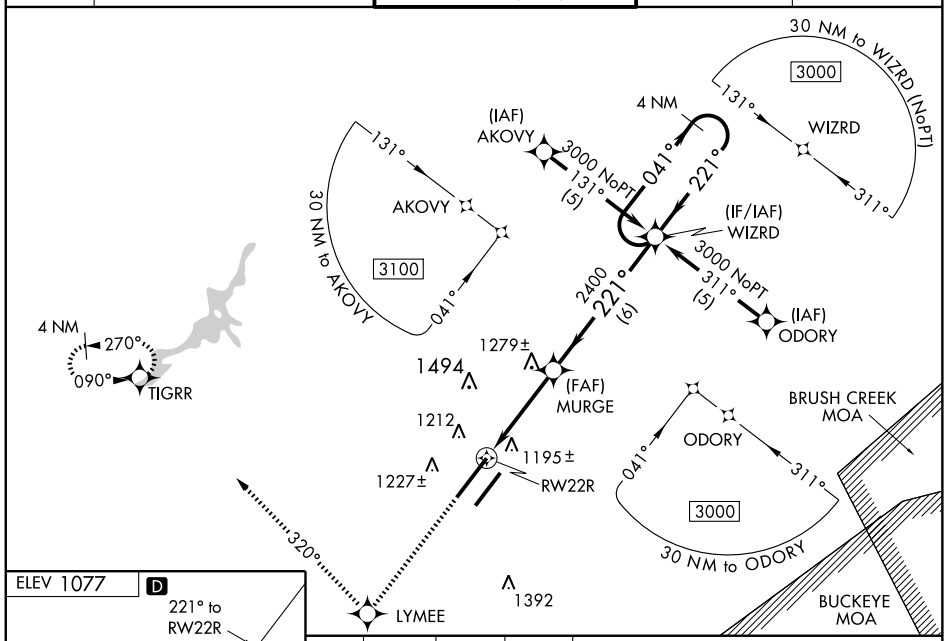
RNAV (GPS) RWY 22R
WILMINGTON/ AIRBORNE AIRPARK (ILN)

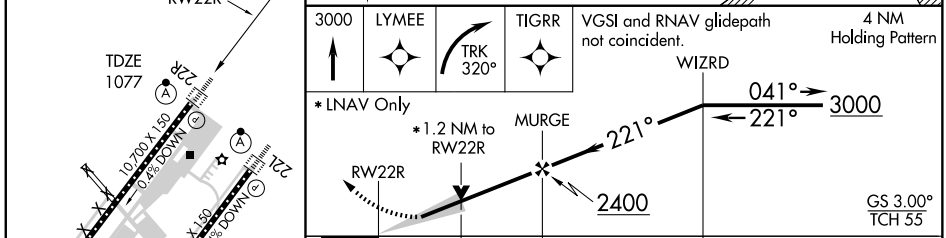
For inoperative ALSF-2 when using James M. Cox Dayton Intl altimeter setting, increase LPV visibility to RVR 5000 all Cats. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. When local altimeter setting not received, use James M. Cox Dayton Intl altimeter setting and increase all DA 90 feet and all MDA 100 feet. Increase LNAV/VNAV visibility to RVR 6000 all Cats, LNAV visibility Cat C to RVR 5000, Cat D to RVR 6000, and Circling Cat C/D visibility ¼ mile. VDP and Baro-VNAV NA when using James M. Cox Dayton Intl altimeter setting.

ALSF-2

MISSED APPROACH: Climb to 3000 direct LYMEE and right turn via track 320° to TIGRR and hold.

ATIS	DAYTON APP CON	WILMINGTON TOWER ★	GND CON	CLNC DEL
124.925	126.5 327.1	119.475 (CTAF)	121.6	125.6





CATEGORY	A	B	C	D
LPV DA	1277/24 200 (200-½)			
LNAV/ VNAV DA	1497/50 420 (500-1)			
LNAV MDA	1540/24 463 (500-½)		1540/40 463 (500-¾)	1540/50 463 (500-1)
CIRCLING	1640-1 563 (600-1)		1640-1½ 563 (600-1½)	1680-2 603 (700-2)

TDZ/CL Rwys 22L and 22R
HIRL Rwys 4R-22L and 4L-22R

EC-2, 14 JAN 2010 to 11 FEB 2010

VOR/DME MXQ 112.9 Chan 76	APP CRS 225°	Rwy ldg 10700 TDZE 1077 Apt Elev 1077

VOR/DME RWY 22R

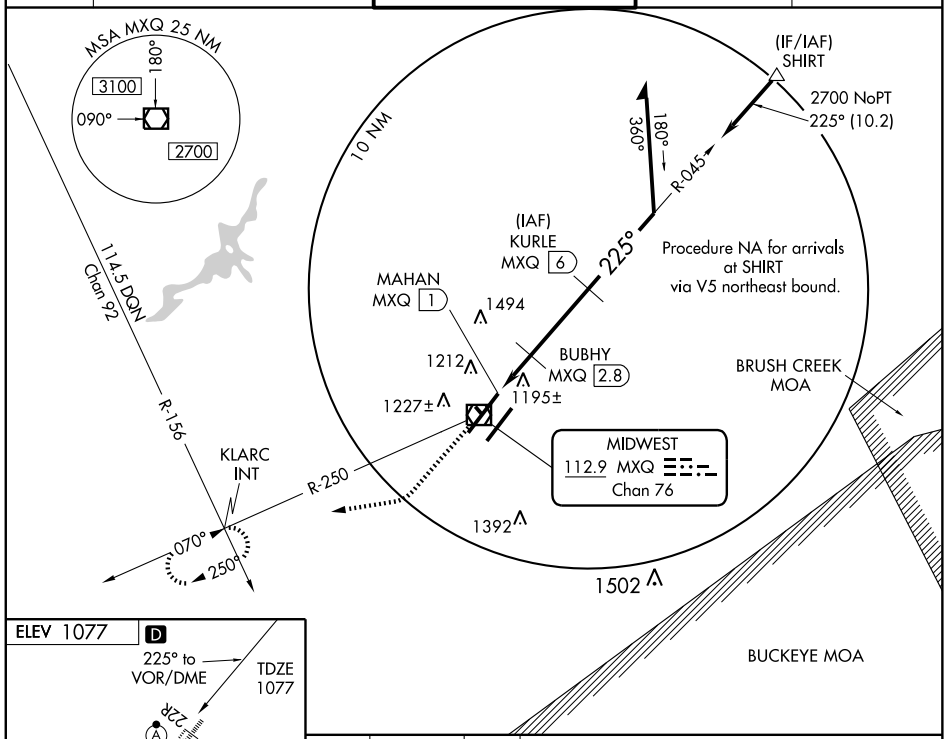
WILMINGTON/AIRBORNE AIRPARK (ILN)

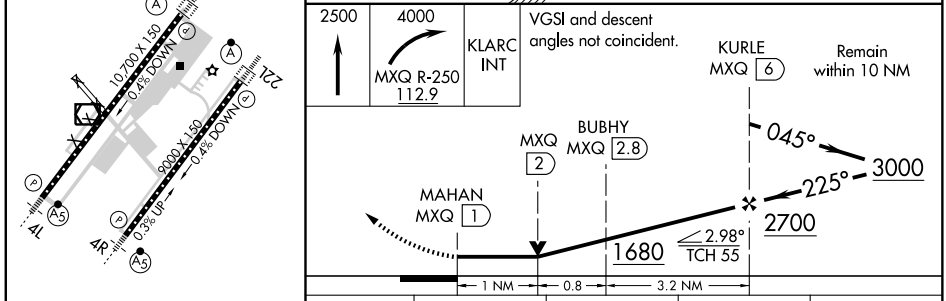
For inoperative ALSF-2, increase S-22R Cat D visibility to RVR 6000. When local altimeter setting not received, use James M. Cox Dayton Intl altimeter setting and increase all MDA 100 feet. Increase S-22R Cat C and Circling Cat C/D visibility ¼ mile. VDP NA when using James M. Cox Dayton Intl altimeter setting.

ALSF-2

MISSED APPROACH: Climb to 2500 then climbing right turn to 4000 via MXQ VOR/DME R-250 to KLARC INT and hold.

ATIS	DAYTON APP CON	WILMINGTON TOWER ★	GND CON	CLNC DEL
124.925	126.5 327.1	119.475 (CTAF)	121.6	125.6





CATEGORY	A	B	C	D
S-22R	1460/24 383 (400-½)			1460/50 383 (400-1)
CIRCLING	1640-1 563 (600-1)		1640-1½ 563 (600-1½)	1680-2 603 (700-2)

TDZ/CL Rwys 22L and 22R
HIRL Rwys 4R-22L and 4L-22R

VOR/DME MXQ	APP CRS	Rwy ldg	10700
112.9	039°	TDZE	1057
Chan 76		Apt Elev	1077

VOR or GPS RWY 4L

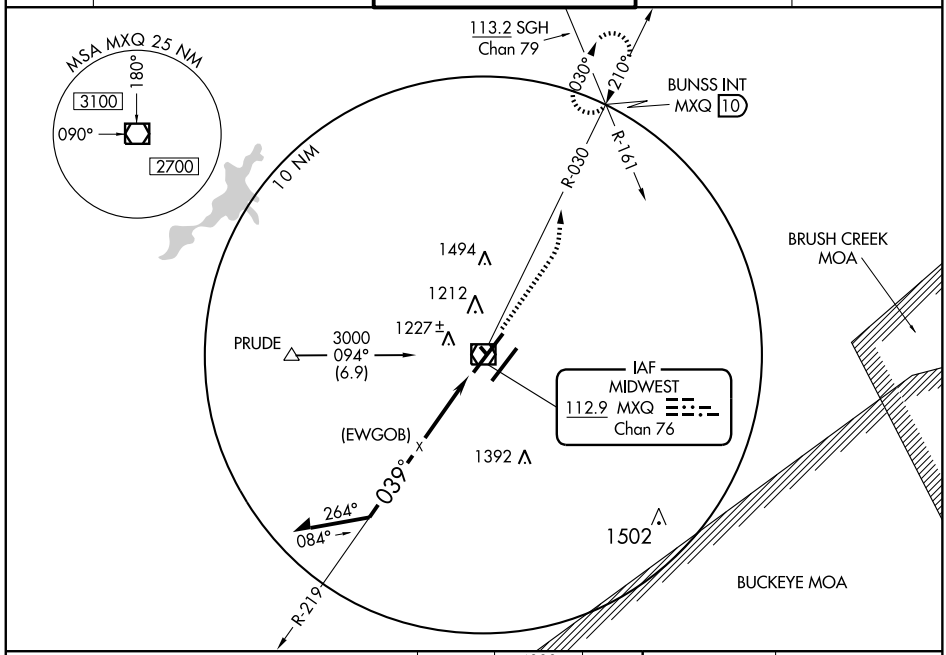
WILMINGTON/AIRBORNE AIRPARK (ILN)

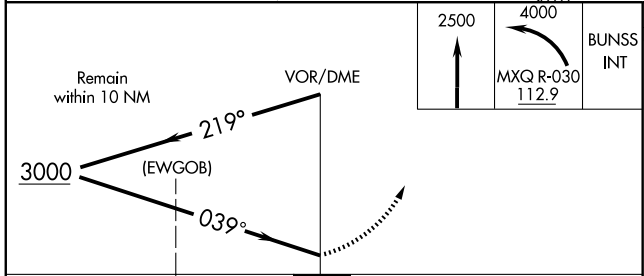
Obtain local altimeter setting on CTAF; when not received, use Dayton Intl altimeter setting. Obtain HIRL Rwy 4L-22R, MALSR Rwy 4L and ALSF-2 Rwy 22R on CTAF.

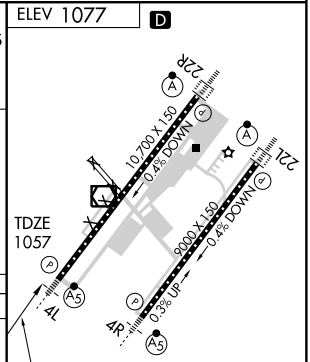
MALSR

MISSED APPROACH: Climb to 2500, then climbing left turn to 4000 via MXQ R-030 to BUNSS Int/MXQ 10 DME and hold.

ATIS	DAYTON APP CON	WILMINGTON TOWER ★	GND CON	CLNC DEL
124.925	126.5 327.1	119.475 (CTAF)	121.6	125.6







CATEGORY	A	B	C	D
S-4L	1520/24 463 (500-½)		1520/40 463 (500-¾)	1520/60 463 (500-1¼)
CIRCLING	1640-1 563 (600-1)		1640-1½ 563 (600-1½)	1680-2 603 (700-2)
DAYTON INTL ALTIMETER SETTING MINIMUMS				
S-4L	1620-½ 563 (600-½)		1620-1 563 (600-1)	1620-1¼ 563 (600-1¼)
CIRCLING	1740-1 663 (700-1)		1740-1¾ 663 (700-1¾)	1780-2¼ 703 (800-2¼)

TDZ/CL Rwys 22L and 22R
HIRL Rwys 4R-22L and 4L-22R

EC-2, 14 JAN 2010 to 11 FEB 2010

VOR/DME MXQ 112.9 Chan 76	APP CRS 225°	Rwy ldg 10700 TDZE 1077 Apt Elev 1077

VOR RWY 22R

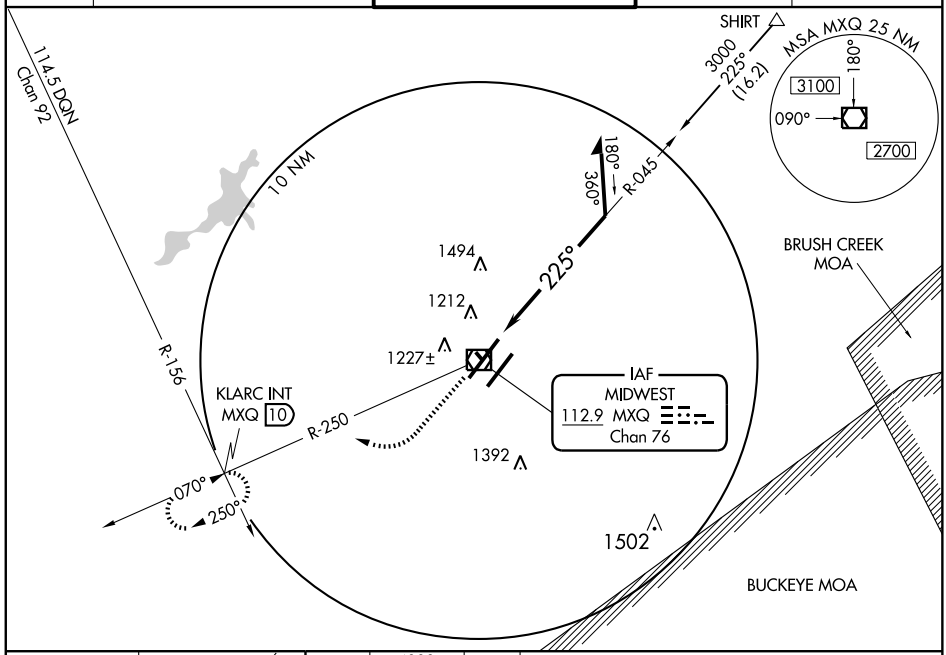
WILMINGTON/AIRBORNE AIRPORT (ILN)

Obtain local altimeter setting on CTAF; when not received, use Dayton Intl altimeter setting. Obtain HIRL Rwy 4L-22R, MALSR Rwy 4L and ALSF-2 Rwy 22R on CTAF.

ALSF-2

MISSED APPROACH: Climb to 2500 then climbing right turn to 4000 via MXQ R-250 to KLARC Int/MXQ 10 DME and hold.

ATIS	DAYTON APP CON	WILMINGTON TOWER ★	GND CON	CLNC DEL
124.925	126.5 327.1	119.475 (CTAF)	121.6	125.6

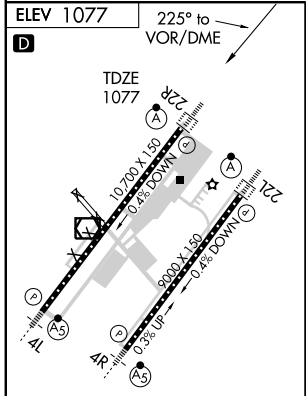


ELEV 1077

D

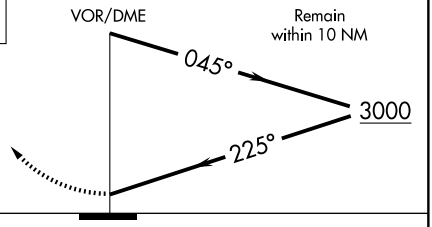
225° to VOR/DME

TDZE 1077



TDZ/CL Rwys 22L and 22R
HIRL Rwys 4R-22L and 4L-22R

2500	4000	KLARC INT
	MXQ R-250 112.9	



CATEGORY	A	B	C	D
S-22R	1640/24 563 (600-½)		1640/50 563 (600-1)	1640/60 563 (600-1¼)
CIRCLING	1640-1 563 (600-1)		1640-1½ 563 (600-1½)	1680-2 603 (700-2)
DAYTON INTL ALTIMETER SETTING MINIMUMS				
S-22R	1740-½ 663 (700-½)		1740-1¼ 663 (700-1¼)	1740-1½ 663 (700-1½)
CIRCLING	1740-1 663 (700-1)		1740-1¾ 663 (700-1¾)	1780-2¼ 703 (800-2¼)

EC-2, 14 JAN 2010 to 11 FEB 2010

VOR/DME AIR 117.1 Chan 118	APP CRS 229°	Rwy ldg 3805 TDZE 1195 Apt Elev 1195

VOR/DME or GPS RWY 25

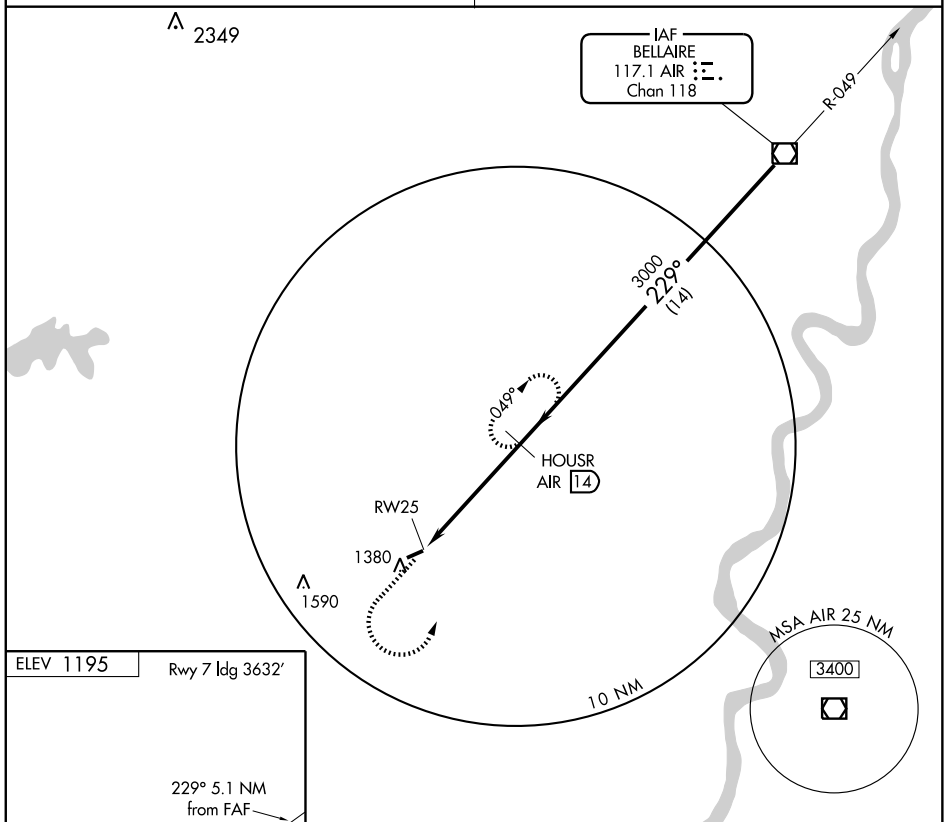
WOODSFIELD/MONROE COUNTY (4G5)

NA

Use Parkersburg, WV altimeter setting.

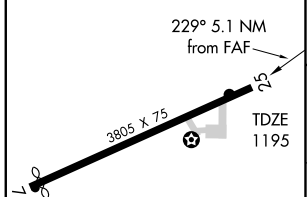
MISSED APPROACH: Climb to 3000 then left turn via AIR R-229 to HOUSR/14 DME and hold.

CLEVELAND CENTER	UNICOM
120.4 257.975	122.8 (CTAF) L



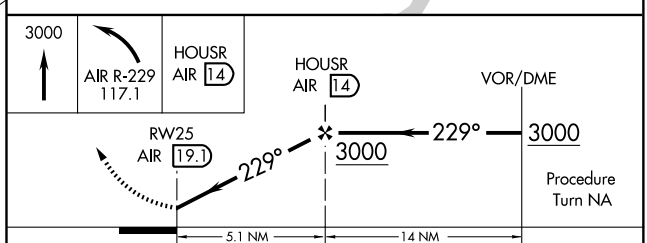
ELEV 1195

Rwy 7 ldg 3632′



REIL Rwy 25 L
MIRL Rwy 7-25 L

Knots	60	90	120	150	180
Min:Sec					



CATEGORY	A	B	C	D
S-25	1820-1 625 (700-1)		1820-1¾ 625 (700-1¾)	NA
CIRCLING	1880-1 685 (700-1)		1880-2 685 (700-2)	NA

EC-2, 14 JAN 2010 to 11 FEB 2010

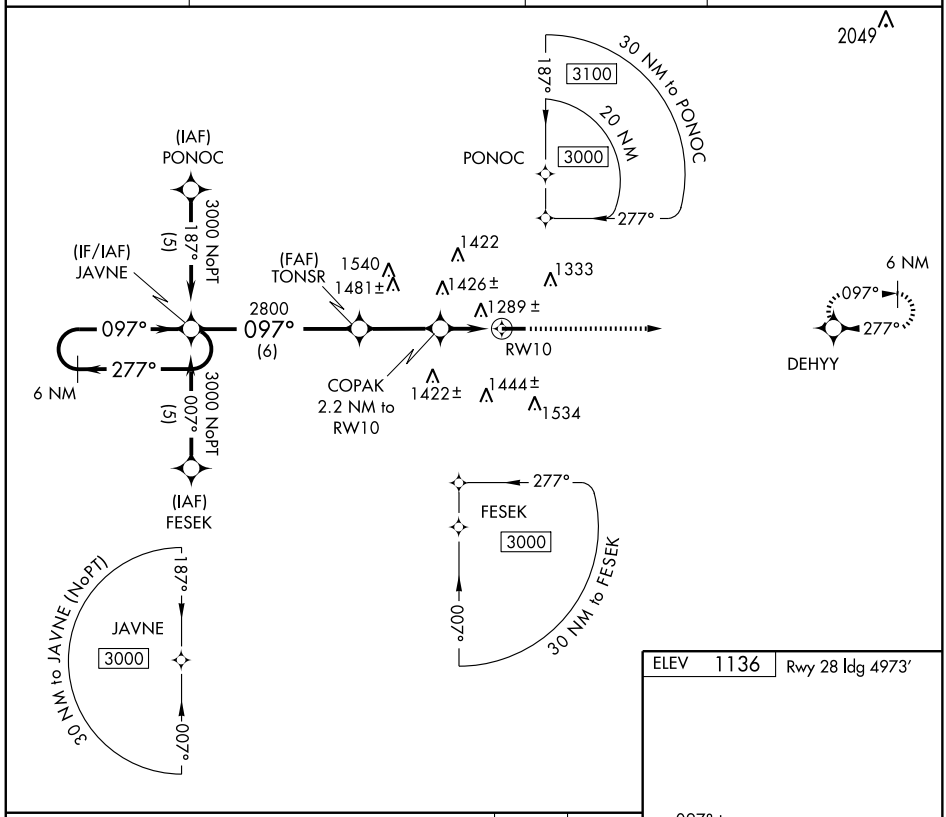
APP CRS	Rwy ldg	5191
097°	TDZE	1113
	Apt Elev	1136

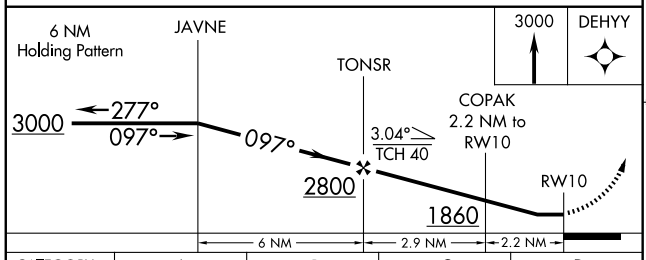
RNAV (GPS) RWY 10
WOOSTER / WAYNE COUNTY (BJJ)

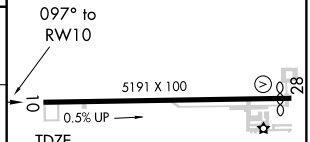
DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA.
When local altimeter setting not received, use Akron-Canton Rgnl altimeter setting and increase all MDA 60 feet.

MISSED APPROACH: Climb to 3000 direct DEHYY and hold.

ASOS	AKRON-CANTON APP CON ★	CLNC DEL	UNICOM
118.075	118.6 323.0	121.75	122.8 (CTAF) L







CATEGORY	A	B	C	D
LNAV MDA	1540-1 427 (500-1)		1540-1¼ 427 (500-1¼)	1540-1½ 427 (500-1½)
CIRCLING	1600-1 464 (500-1)		1600-1½ 464 (500-1½)	1700-2 564 (600-2)

REIL Rwys 10 and 28 L
HIRL Rwy 10-28 L

EC-2, 14 JAN 2010 to 11 FEB 2010

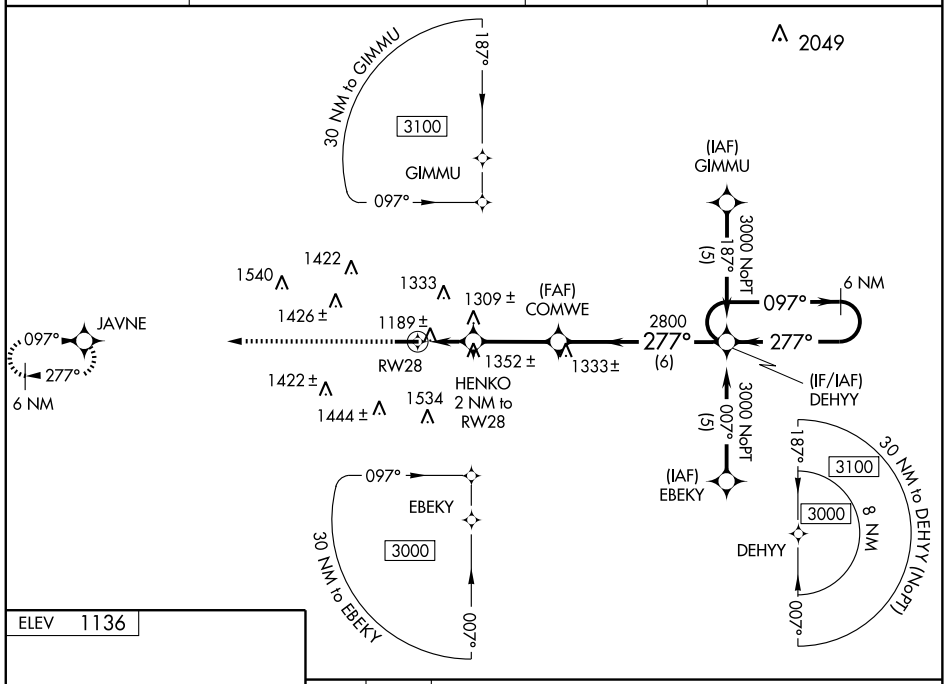
WAAS CH 82215 W28A	APP CRS 277°	Rwy ldg 4973 TDZE 1134 Apt Elev 1136

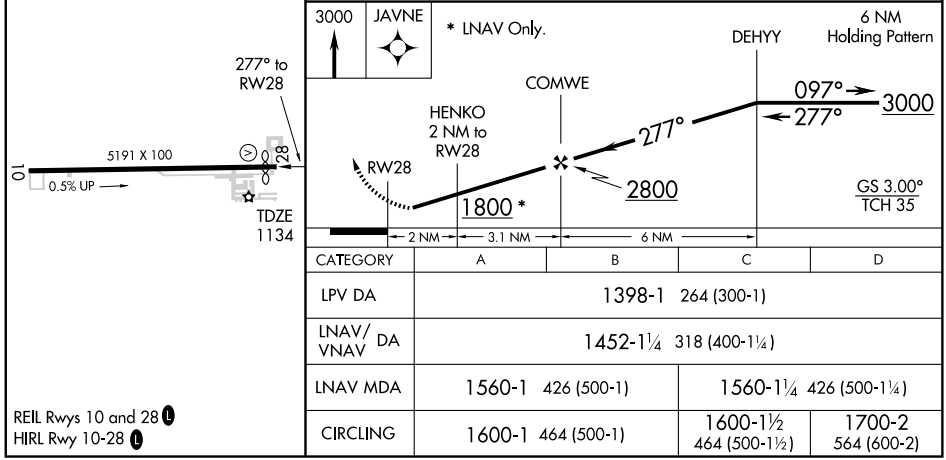
RNAV (GPS) RWY 28
WOOSTER / WAYNE COUNTY (BJJ)

Baro-VNAV NA when using Akron-Canton Rgnl altimeter setting. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. Visibility reduction by helicopters NA. When local altimeter setting not received, use Akron-Canton Rgnl altimeter setting and increase all DA and MDA 60 feet, increase LPV visibility all Cats ¼ mile, and increase LNAV Cat D visibility ¼ mile.

MISSED APPROACH: Climb to 3000 direct JAVNE and hold.

ASOS	AKRON-CANTON APP CON *	CLNC DEL	UNICOM
118.075	118.6 323.0	121.75	122.8 (CTAF) L





CATEGORY	A	B	C	D
LPV DA	1398-1 264 (300-1)			
LNAV/VNAV DA	1452-1¼ 318 (400-1¼)			
LNAV MDA	1560-1 426 (500-1)		1560-1¼ 426 (500-1¼)	
CIRCLING	1600-1 464 (500-1)		1600-1½ 464 (500-1½)	1700-2 564 (600-2)

REIL Rwys 10 and 28 L
HIRL Rwy 10-28 L

EC-2, 14 JAN 2010 to 11 FEB 2010

VOR RWY 10

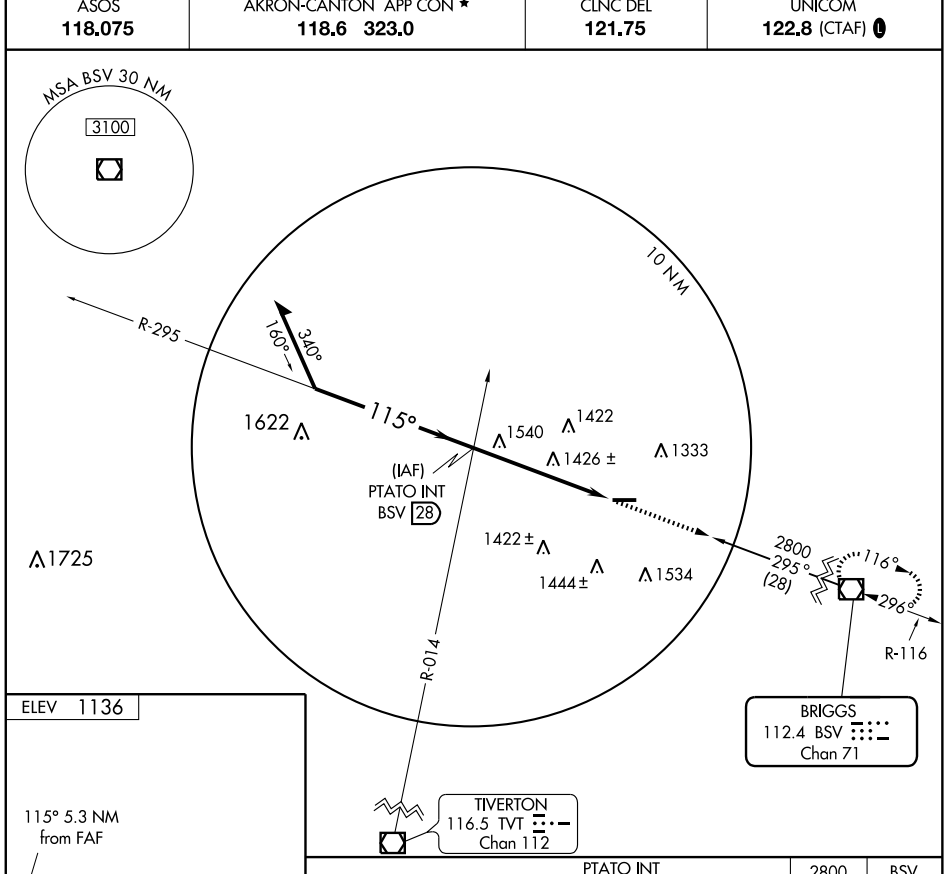
WOOSTER / WAYNE COUNTY (BJJ)

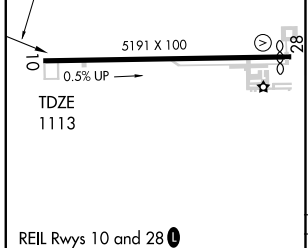
VOR/DME BSV 112.4 Chan 71	APP CRS 115°	Rwy ldg 5191 TDZE 1113 Apt Elev 1136

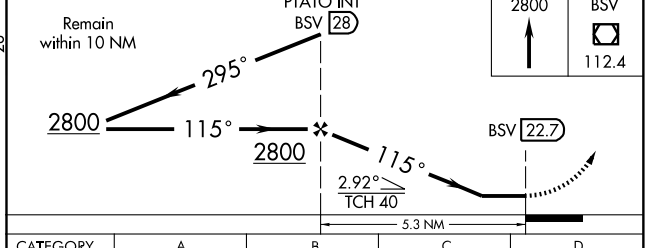
Visibility reduction by helicopters NA. When local altimeter setting not received, use Akron-Canton Rgnl altimeter setting and increase all MDA 60 feet; increase S-10 Cat C/D and Circling Cat C/D visibilities ¼ mile.

MISSED APPROACH: Climb to 2800 direct BSV VOR/DME and hold.

ASOS	AKRON-CANTON APP CON ★	CLNC DEL	UNICOM
118.075	118.6 323.0	121.75	122.8 (CTAF) L







REIL Rwys 10 and 28 L
HIRL Rwy 10-28 L

FAF to MAP 5.3 NM					
Knots	60	90	120	150	180
Min:Sec	5:18	3:32	2:39	2:07	1:46

CATEGORY	A	B	C	D
S-10	1840-1 727 (800-1)	1840-1¼ 727 (800-1¼)	1840-2 727 (800-2)	1840-2¼ 727 (800-2¼)
CIRCLING	1840-1 704 (800-1)	1840-1¼ 704 (800-1¼)	1840-2 704 (800-2)	1840-2¼ 704 (800-2¼)

EC-2, 14 JAN 2010 to 11 FEB 2010

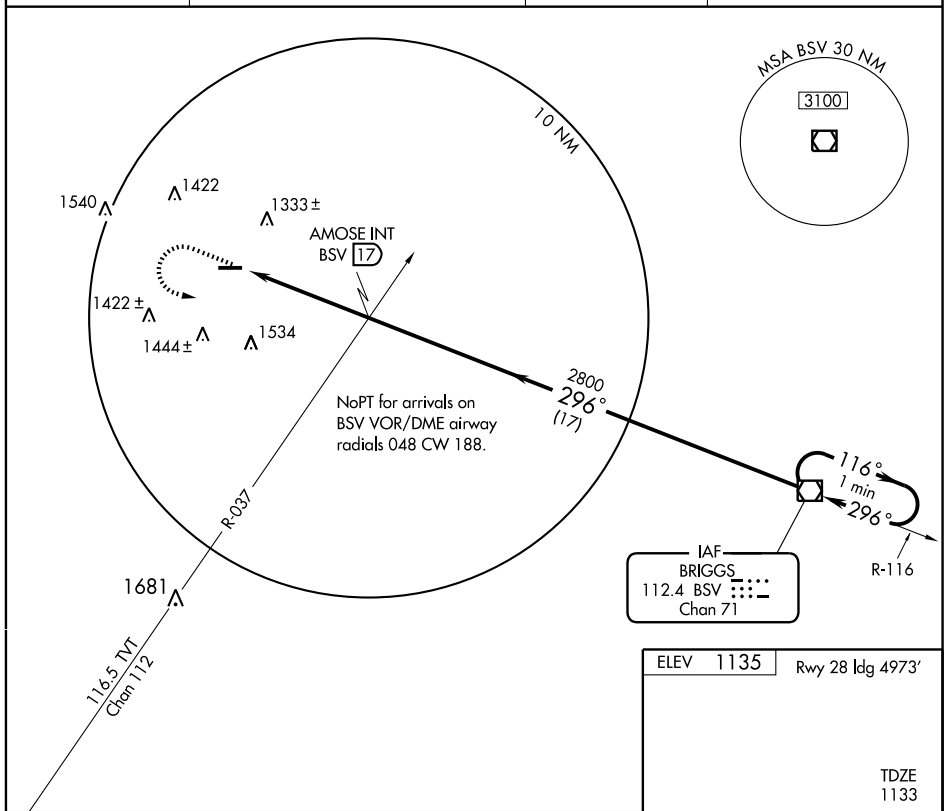
VOR/DME BSV 112.4 Chan 71	APP CRS 296°	Rwy ldg 4973 TDZE 1133 Apt Elev 1135

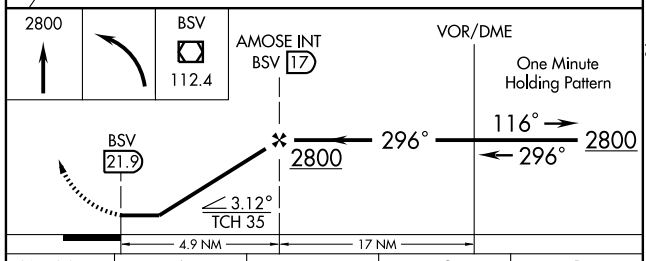
VOR RWY 28

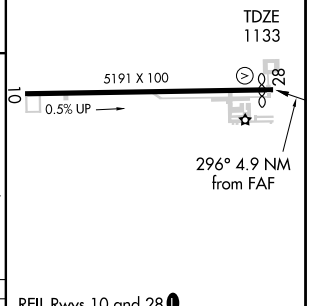
WOOSTER / WAYNE COUNTY (BJJ)

MISSED APPROACH: Climb to 2800, then left turn direct BSV VOR/DME and hold.

ASOS	AKRON-CANTON APP CON ★	CLNC DEL	UNICOM
118.075	118.6 323.0	121.75	122.8 (CTAF) L







REIL Rwys 10 and 28 L
HIRL Rwy 10-28 L

CATEGORY	A	B	C	D
S-28	1660-1 527 (600-1)	1660-1¼ 527 (600-1¼)	1660-1½ 527 (600-1½)	1660-1¾ 527 (600-1¾)
CIRCLING	1660-1 525 (600-1)	1660-1¼ 525 (600-1¼)	1660-1½ 525 (600-1½)	1700-2 565 (600-2)

FAF to MAP 4.9 NM					
Knots	60	90	120	150	180
Min:Sec	4:54	3:16	2:27	1:58	1:38

EC-2. 14 JAN 2010 to 11 FEB 2010

NDB HBD	APP CRS	Rwy ldg	N/A
408	260°	TDZE	N/A
		Apt Elev	1057

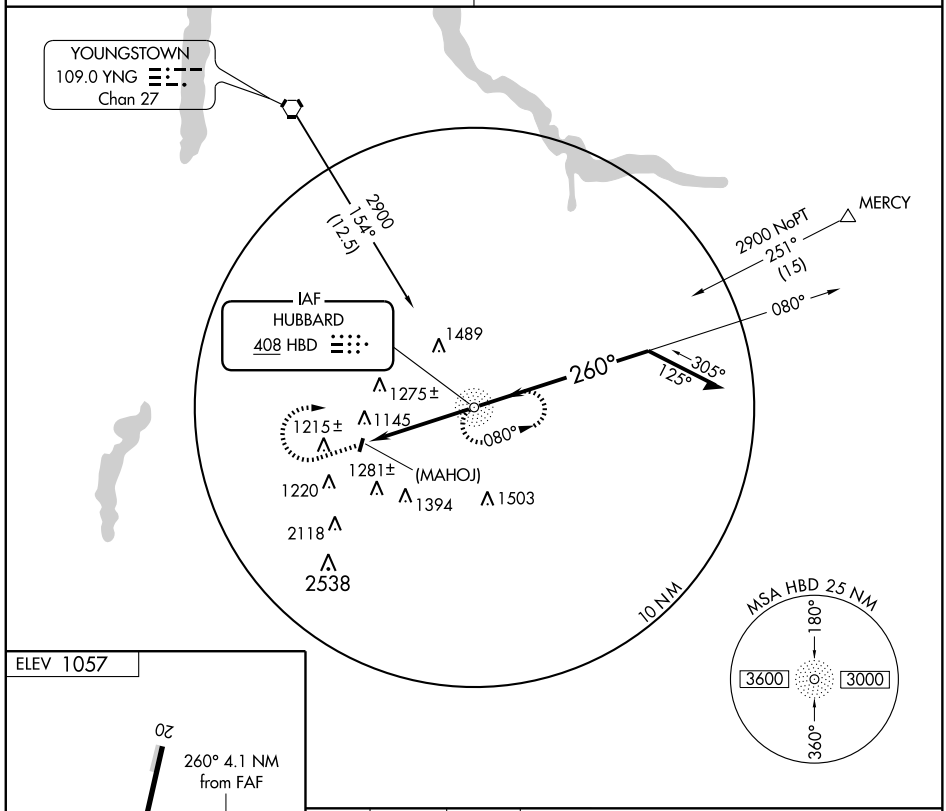
NDB or GPS-B

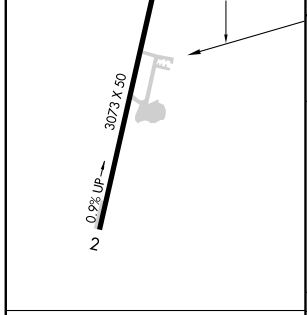
YOUNGSTOWN/ LANSDOWNE (Ø4G)

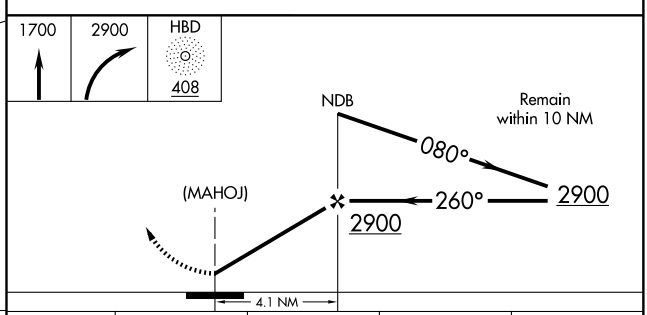
Use Youngstown-Warren Rgnl altimeter setting.
NA Procedure not authorized at night.

MISSED APPROACH: Climb to 1700 then climbing right turn to 2900 direct HBD NDB and hold.

YOUNGSTOWN APP CON ★	UNICOM
133.95 322.3	122.8 (CTAF)







FAF to MAP 4.1 NM					
Knots	60	90	120	150	180
Min:Sec	4:06	2:44	2:03	1:38	1:22

CATEGORY	A	B	C	D
CIRCLING	1620-1 563 (600-1)		1620-1½ 563 (600-1½)	NA

EC-2, 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	3664
098°	TDZE	1051
	Apt Elev	1070

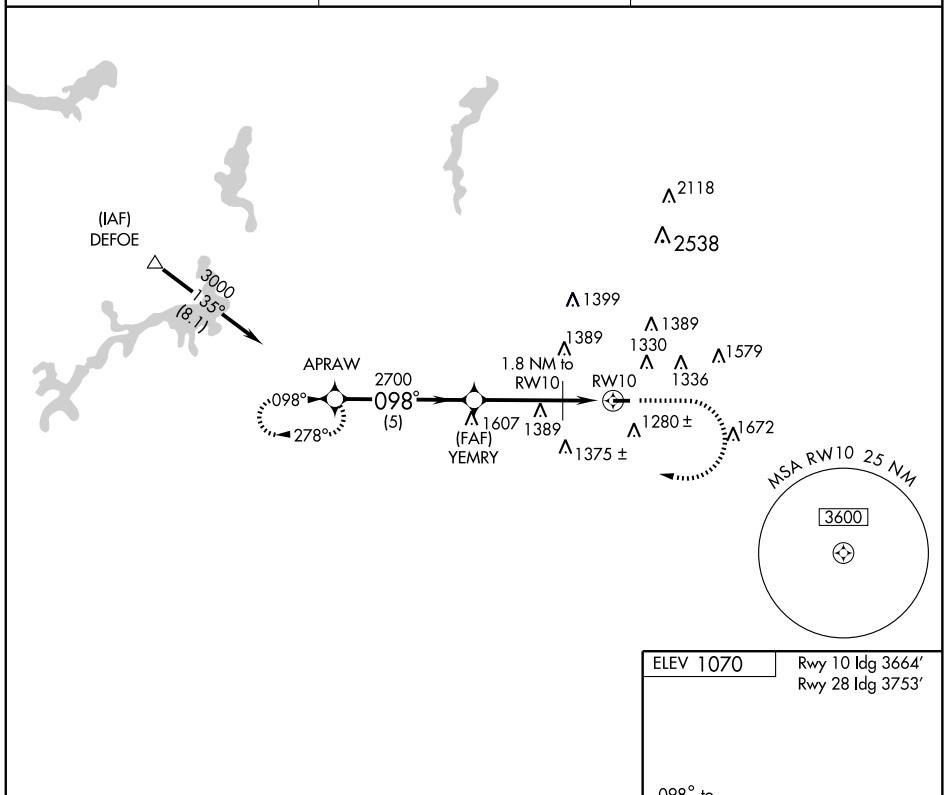
GPS RWY 10
YOUNGSTOWN ELSER METRO (4G4)

Obtain local altimeter setting on CTAF; when not received, use Youngstown-Warren Rgnl altimeter setting.

NA

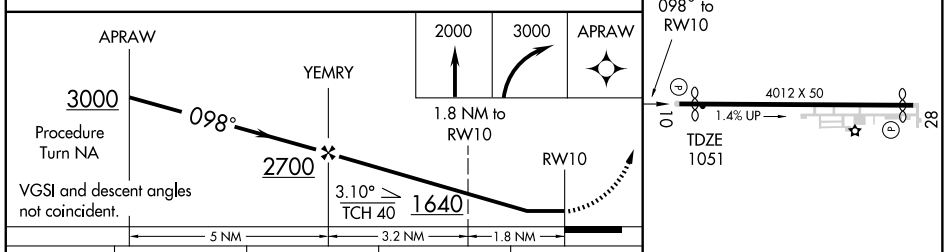
MISSED APPROACH: Climb to 2000, then climbing right turn to 3000 direct APRAW WP and hold.

AKRON-CANTON APP CON ★	CLNC DEL	UNICOM
125.5 371.875	119.25	123.05 (CTAF)



ELEV 1070

Rwy 10 ldg 3664′
Rwy 28 ldg 3753′



CATEGORY	A	B	C	D
S-10	1540 - 1	489 (500-1)	NA	
CIRCLING	1640 - 1	570 (600-1)	NA	
YOUNGSTOWN-WARREN RGNL ALTIMETER SETTING MINIMUMS				
S-10	1600 - 1	549 (600-1)	NA	
CIRCLING	1700 - 1	630 (700-1)	NA	

MIRL Rwy 10-28
REIL Rwys 10 and 28

EC-2. 14 JAN 2010 to 11 FEB 2010

APP CRS	Rwy ldg	3753
279°	TDZE	1063
	Apt Elev	1070

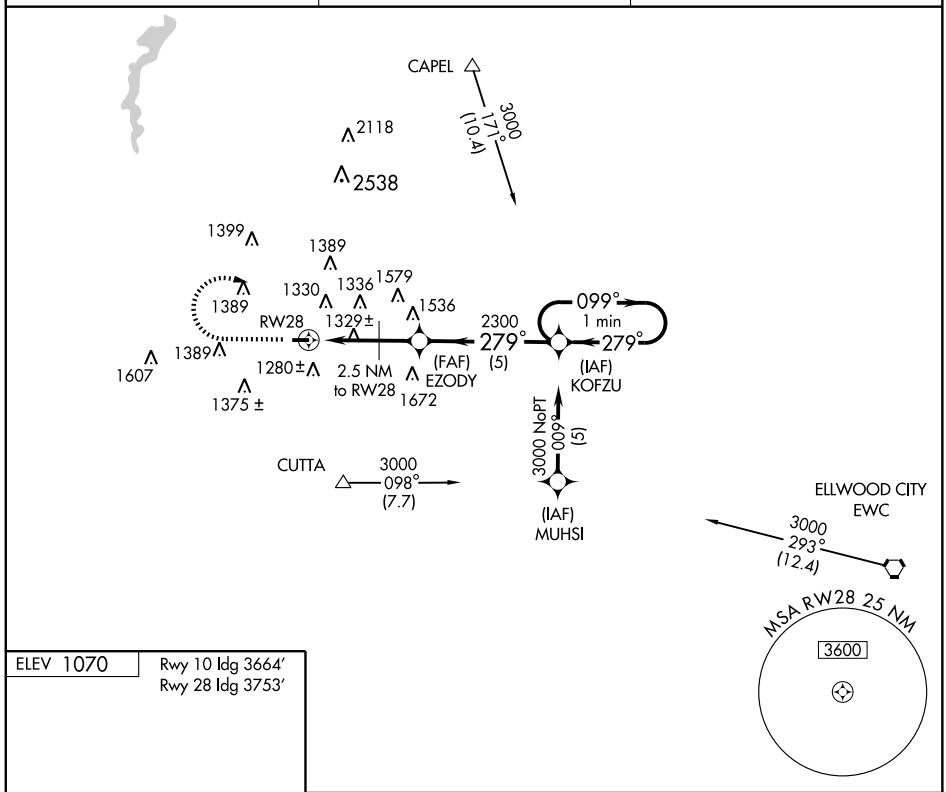
GPS RWY 28
YOUNGSTOWN ELSER METRO (4G4)

Obtain local altimeter setting on CTAF; when not received, use Youngstown-Warren Rgnl altimeter setting.

NA

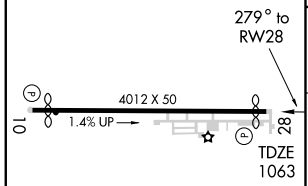
MISSED APPROACH: Climb to 1800, then climbing right turn to 3000 direct KOFZU WP and hold.

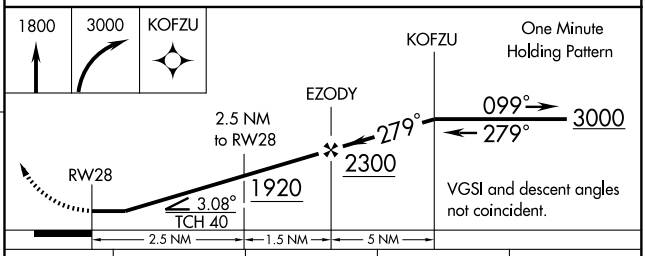
AKRON-CANTON APP CON ★	CLNC DEL	UNICOM
125.5 371.875	119.25	123.05 (CTAF)



ELEV 1070

Rwy 10 ldg 3664′
Rwy 28 ldg 3753′





CATEGORY	A	B	C	D
S-28	1600-1	537 (600-1)	NA	
CIRCLING	1640-1	570 (600-1)	NA	
YOUNGSTOWN-WARREN RGNL ALTIMETER SETTING MINIMUMS				
S-28	1660-1	597 (600-1)	NA	
CIRCLING	1700-1	630 (700-1)	NA	

MIRL Rwy 10-28
REIL Rwys 10 and 28

EC-2, 14 JAN 2010 to 11 FEB 2010

VOR/DME ACO	APP CRS	Rwy ldg	N/A
114.4	114°	TDZE	N/A
Chan 91		Apt Elev	1070

VOR or GPS-C

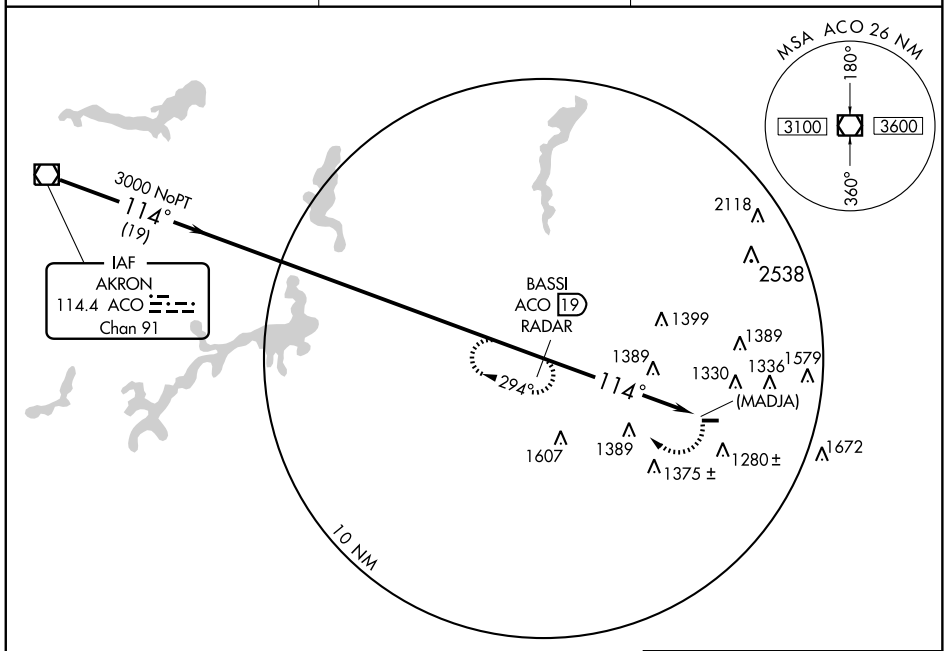
YOUNGSTOWN ELSER METRO (4G4)

Obtain local altimeter setting on CTAF; when not received, use Youngstown-Warren Rgnl altimeter setting.

NA

MISSED APPROACH: Climbing right turn to 3000 via ACO R-114 to BASSI/ACO 19 DME/RADAR and hold.

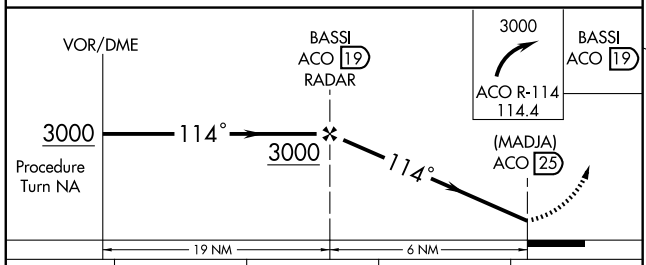
AKRON-CANTON APP CON ★	CLNC DEL	UNICOM
125.5 371.875	119.25	123.05 (CTAF)

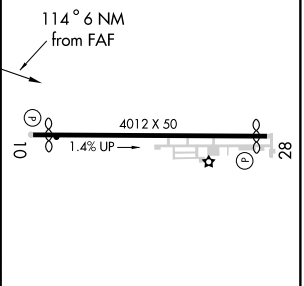


ELEV 1070

Rwy 10 ldg 3664′
Rwy 28 ldg 3753′

DME or RADAR REQUIRED





CATEGORY	A	B	C	D
CIRCLING	1640 - 1 570 (600-1)	1640 - 1¼ 570 (600-1¼)	NA	

MIRL Rwy 10-28
REIL Rwys 10 and 28

YOUNGSTOWN-WARREN RGNL ALTIMETER SETTING MINIMUMS

CIRCLING	1700 - 1 630 (700-1)	1700 - 1¼ 630 (700-1¼)	NA	

FAF to MAP 6 NM

Knots	60	90	120	150	180
Min:Sec	6:00	4:00	3:00	2:24	2:00

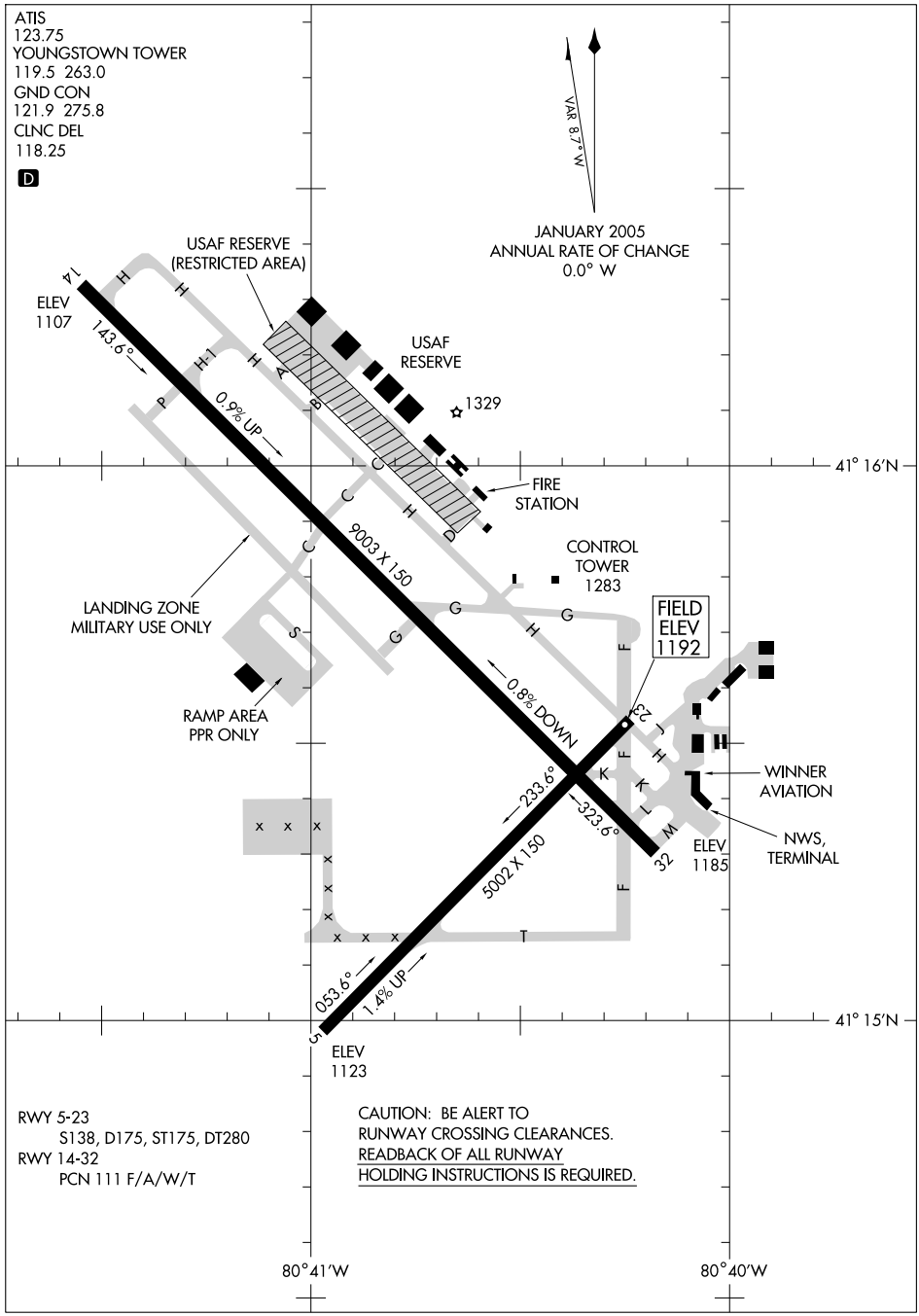
EC-2. 14 JAN 2010 to 11 FEB 2010

09295

AIRPORT DIAGRAM

AL-466 (FAA)

YOUNGSTOWN-WARREN RGNL (YNG)
YOUNGSTOWN-WARREN, OHIO



EC-2, 14 JAN 2010 to 11 FEB 2010

LOC I-MQK	APP CRS	Rwy ldg 9003
110.1	143°	TDZE 1134
		Apt Elev 1196

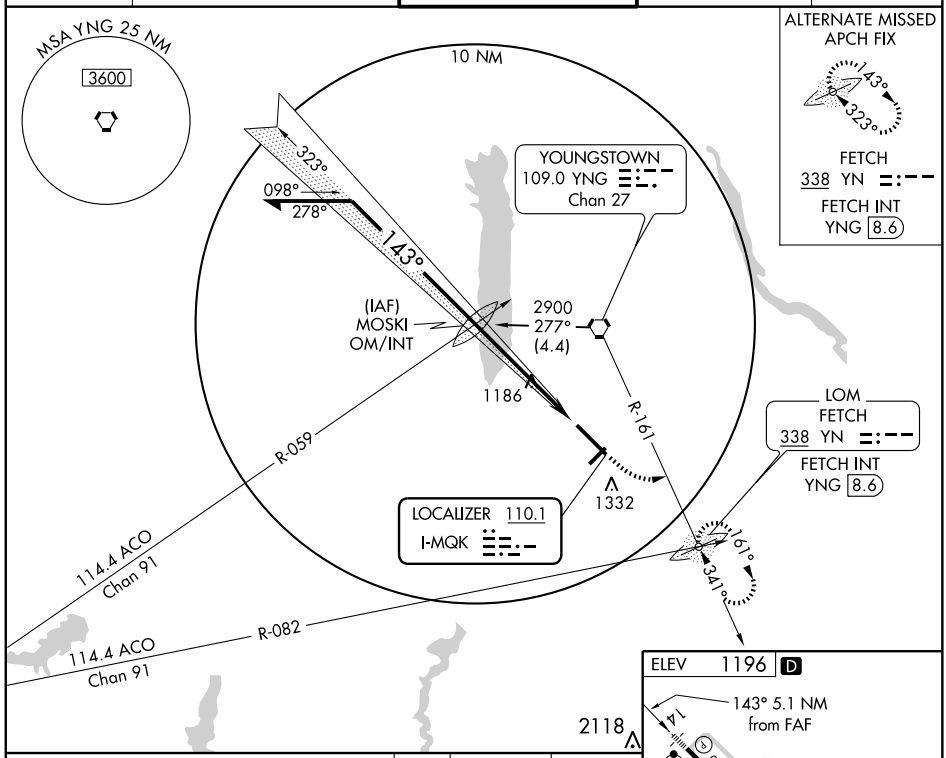
ILS or LOC RWY 14
YOUNGSTOWN-WARREN RGNL (YNG)

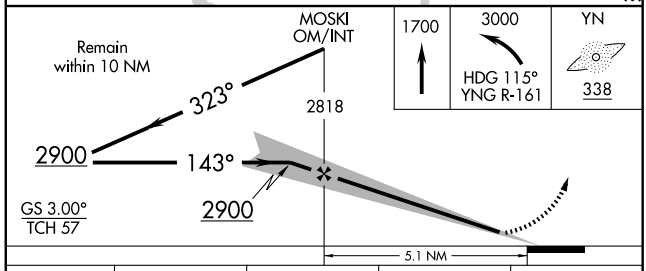
NA
ASR

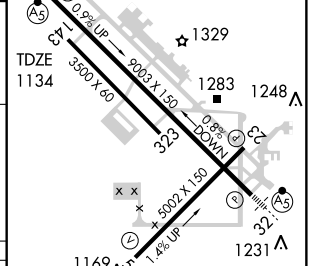
MALSR

MISSED APPROACH: Climb to 1700 then climbing left turn to 3000 via heading 115° and YNG VORTAC R-161 to FETCH LOM/Int/YNG 8.6 DME and hold.

ATIS	YOUNGSTOWN APP CON ★	YOUNGSTOWN TOWER	GND CON	CLNC DEL
123.75	133.95 322.3	119.5 263.0	121.9 275.8	118.25







HIRL Rwy 14-32
MIRL Rwy 5-23
REIL Rwys 5 and 23

CATEGORY	A	B	C	D
S-ILS 14	1334/24 200 (200-½)			
S-LOC 14	1580/24 446 (400-½)		1580/40 446 (400-¾)	1580/50 446 (400-1)
CIRCLING	1640-1 444 (500-1)	1660-1 464 (500-1)	1660-1½ 464 (500-1½)	1760-2 564 (600-2)

FAF to MAP 5.1 NM

Knots	60	90	120	150	180
Min:Sec	5:06	3:24	2:33	2:02	1:42

EC-2. 14 JAN 2010 to 11 FEB 2010

LOC I-YNG	APP CRS	Rwy ldg	9003
110.1	323°	TDZE	1185
		Apt Elev	1196

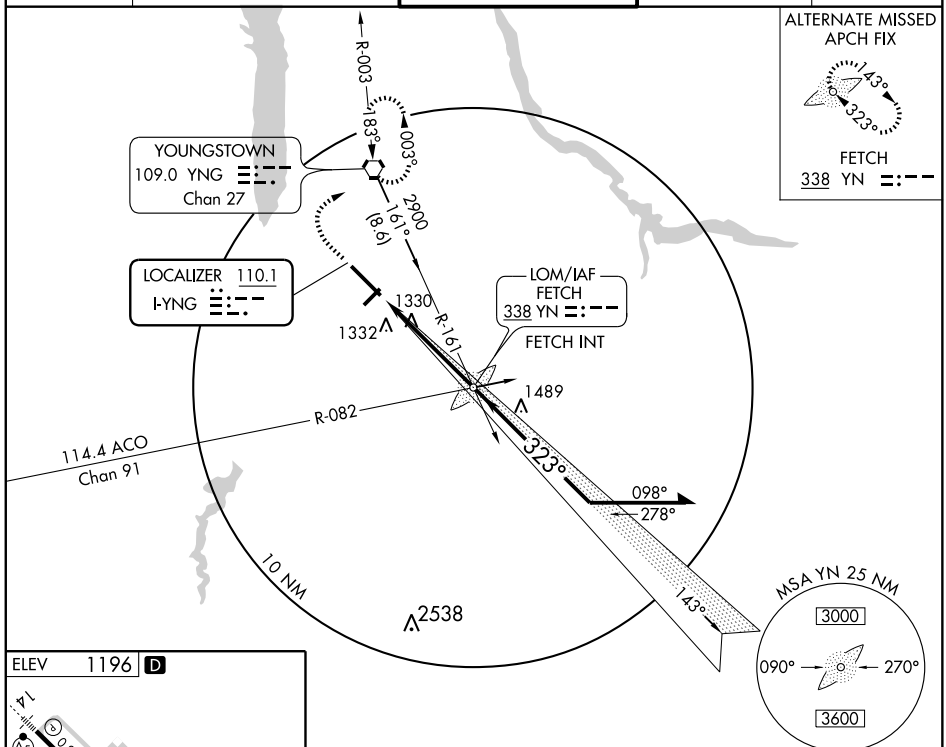
ILS or LOC RWY 32
YOUNGSTOWN-WARREN RGNL (YNG)

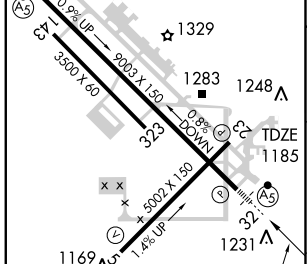
ASR

MALSR

MISSED APPROACH: Climb to 1800 then climbing right turn to 2900 direct YNG VORTAC and hold, continue climb-in-hold to 2900.

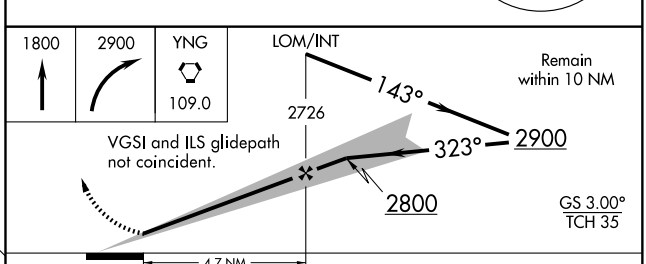
ATIS	YOUNGSTOWN APP CON ★	YOUNGSTOWN TOWER	GND CON	CLNC DEL
123.75	133.95 322.3	119.5 263.0	121.9 275.8	118.25





HIRL Rwy 14-32
MIRL Rwy 5-23
REIL Rwys 5 and 23

323° 4.7 NM from FAF



CATEGORY	A	B	C	D
S-ILS 32	1385/24 200 (200-½)			
S-LOC 32	1580/24 395 (400-½)			1580/40 395 (400-¾)
CIRCLING	1640-1 444 (500-1)	1660-1 464 (500-1)	1660-1½ 464 (500-1½)	1760-2 564 (600-2)

FAF to MAP 4.7 NM					
Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34

EC-2, 14 JAN 2010 to 11 FEB 2010

LOM YN	APP CRS	Rwy ldg	9003
338	323°	TDZE	1185
		Apt Elev	1196

NDB RWY 32

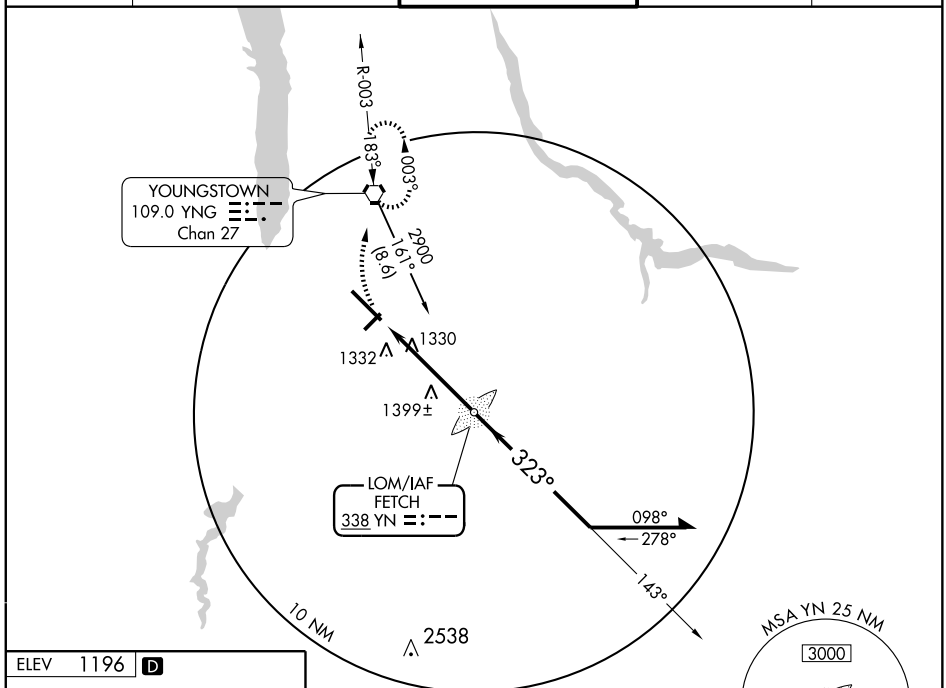
YOUNGSTOWN-WARREN RGNL (YNG)

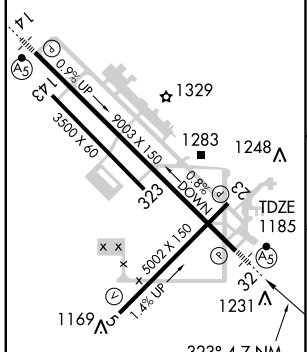
NA
ASR

MALSR

MISSED APPROACH: Climbing right turn to 2900 direct YNG VORTAC and hold, continue climb-in-hold to 2900.

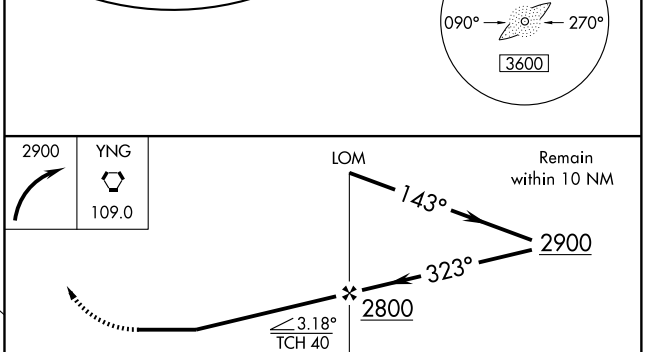
ATIS	YOUNGSTOWN APP CON ★	YOUNGSTOWN TOWER	GND CON	CLNC DEL
123.75	133.95 322.3	119.5 263.0	121.9 275.8	118.25





HIRL Rwy 14-32
MIRL Rwy 5-23
REIL Rwys 5 and 23

FAF to MAP 4.7 NM					
Knots	60	90	120	150	180
Min:Sec	4:42	3:08	2:21	1:53	1:34



CATEGORY	A	B	C	D
S-32	1700/40	515 (600-¾)	1700/50 515 (600-1)	1700-1½ 515 (600-1½)
CIRCLING	1700-1	504 (600-1)	1700-1½ 504 (600-1½)	1760-2 564 (600-2)

EC-2, 14 JAN 2010 to 11 FEB 2010

WAAS CH 49205 W14A	APP CRS 143°	Rwy ldg 9003 TDZE 1134 Apt Elev 1196

RNAV (GPS) RWY 14
YOUNGSTOWN-WARREN RGNL (YNG)

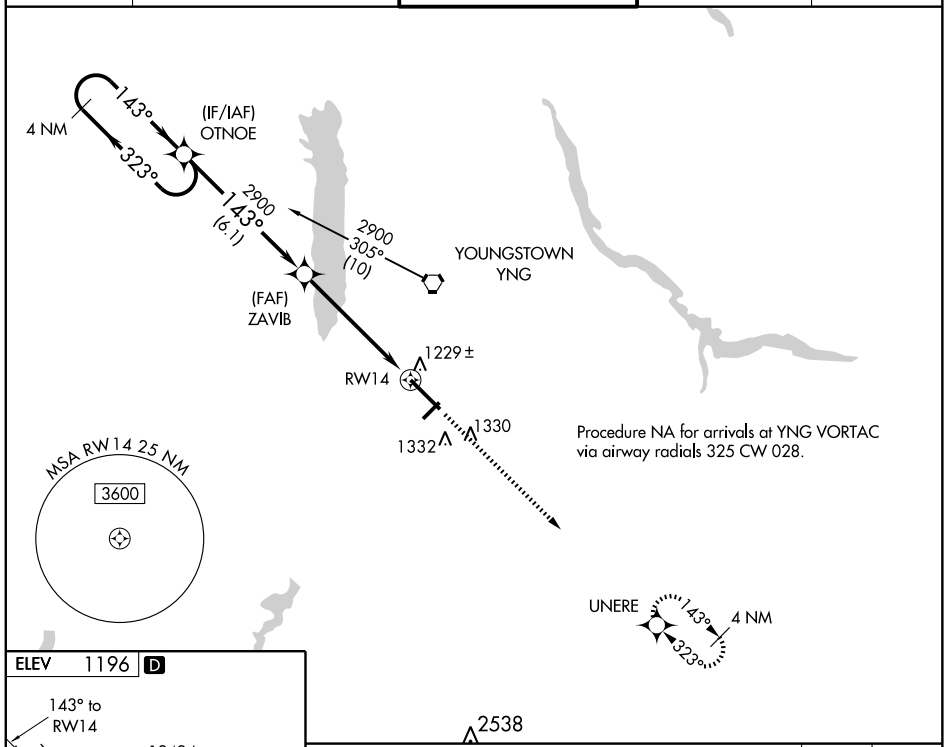
For inoperative MALSR, increase LPV all Cats visibility to RVR 5000 and LNAV Cat D visibility to RVR 6000. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA.

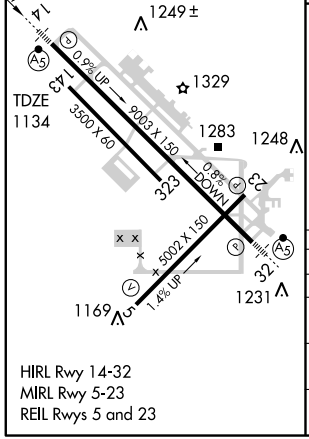
ASR

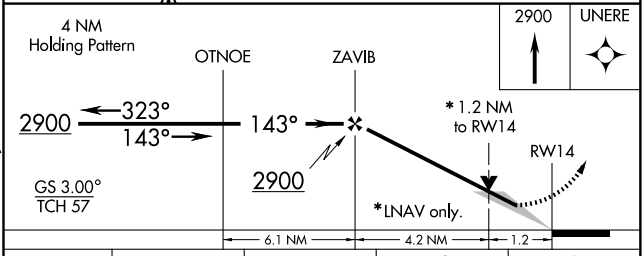
MALSR

MISSED APPROACH: Climb to 2900 direct UNERE and hold.

ATIS	YOUNGSTOWN APP CON ★	YOUNGSTOWN TOWER	GND CON	CLNC DEL
123.75	133.95 322.3	119.5 263.0	121.9 275.8	118.25







CATEGORY	A	B	C	D
LPV DA	1384/24 250 (200-½)			
LNAV/VNAV DA	1499/40 365 (400-¾)			
LNAV MDA	1540/24 406 (400-½)		1540/40 406 (400-¾)	1540/50 406 (400-1)
CIRCLING	1640-1 444 (500-1)	1660-1 464 (500-1)	1660-1½ 464 (500-1½)	1760-2 564 (600-2)

EC-2, 14 JAN 2010 to 11 FEB 2010

WAAS CH 97406 W32A	APP CRS 323°	Rwy ldg 9003 TDZE 1185 Apt Elev 1196

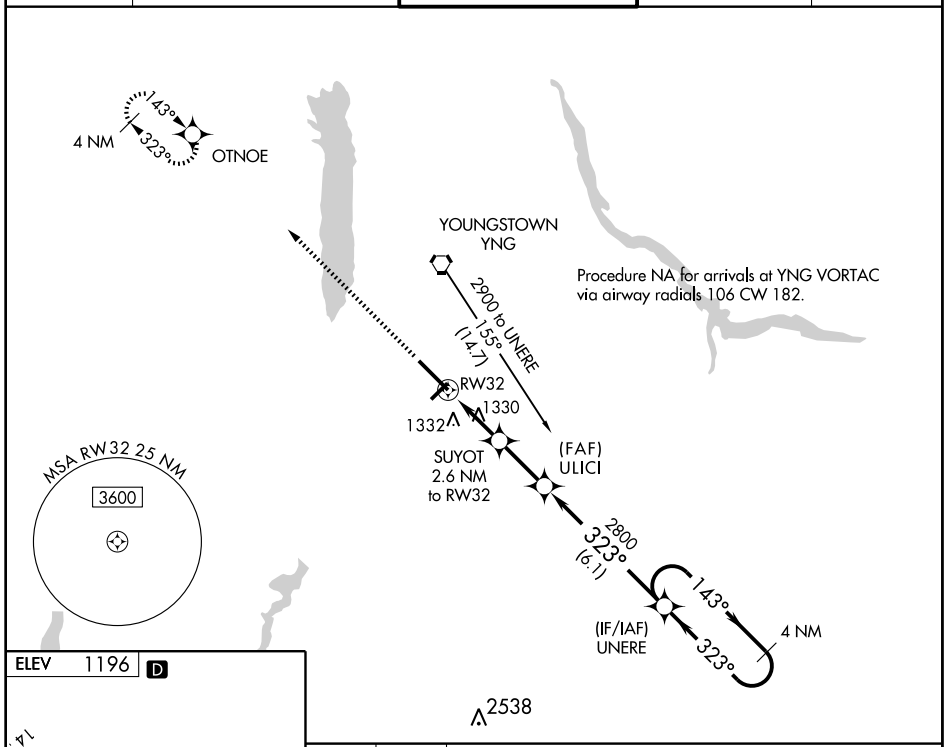
RNAV (GPS) RWY 32
YOUNGSTOWN-WARREN RGNL (YNG)

For inoperative MALSR, increase LPV all Cats visibility to RVR 5000 and LNAV Cat D visibility to RVR 6000. For uncompensated Baro-VNAV systems, LNAV/VNAV NA below -17°C (2°F) or above 46°C (114°F). DME/DME RNP-0.3 NA. ASR

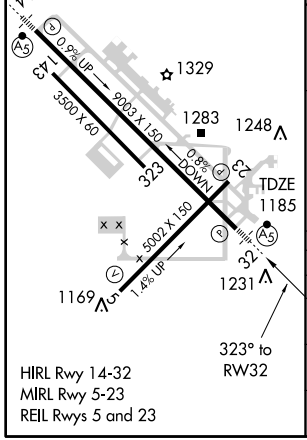
MALSR

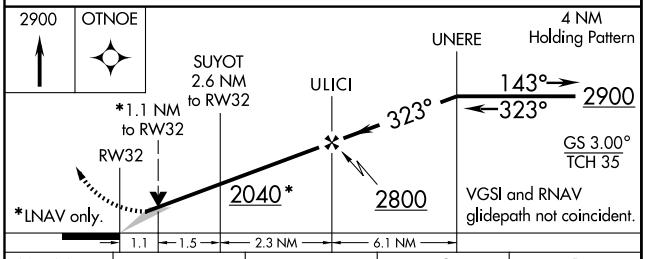
MISSED APPROACH: Climb to 2900 direct OTNOE and hold.

ATIS	YOUNGSTOWN APP CON ★	YOUNGSTOWN TOWER	GND CON	CLNC DEL
123.75	133.95 322.3	119.5 263.0	121.9 275.8	118.25



Procedure NA for arrivals at YNG VORTAC via airway radials 106 CW 182.





CATEGORY	A	B	C	D
LPV DA	1457/24 272 (300-½)			
LNAV/VNAV DA	1638/60 453 (500-1¼)			
LNAV MDA	1580/24 395 (400-½)			1580/50 395 (400-1)
CIRCLING	1640-1 444 (500-1)	1660-1 464 (500-1)	1660-1½ 464 (500-1½)	1760-2 564 (600-2)

EC-2, 14 JAN 2010 to 11 FEB 2010

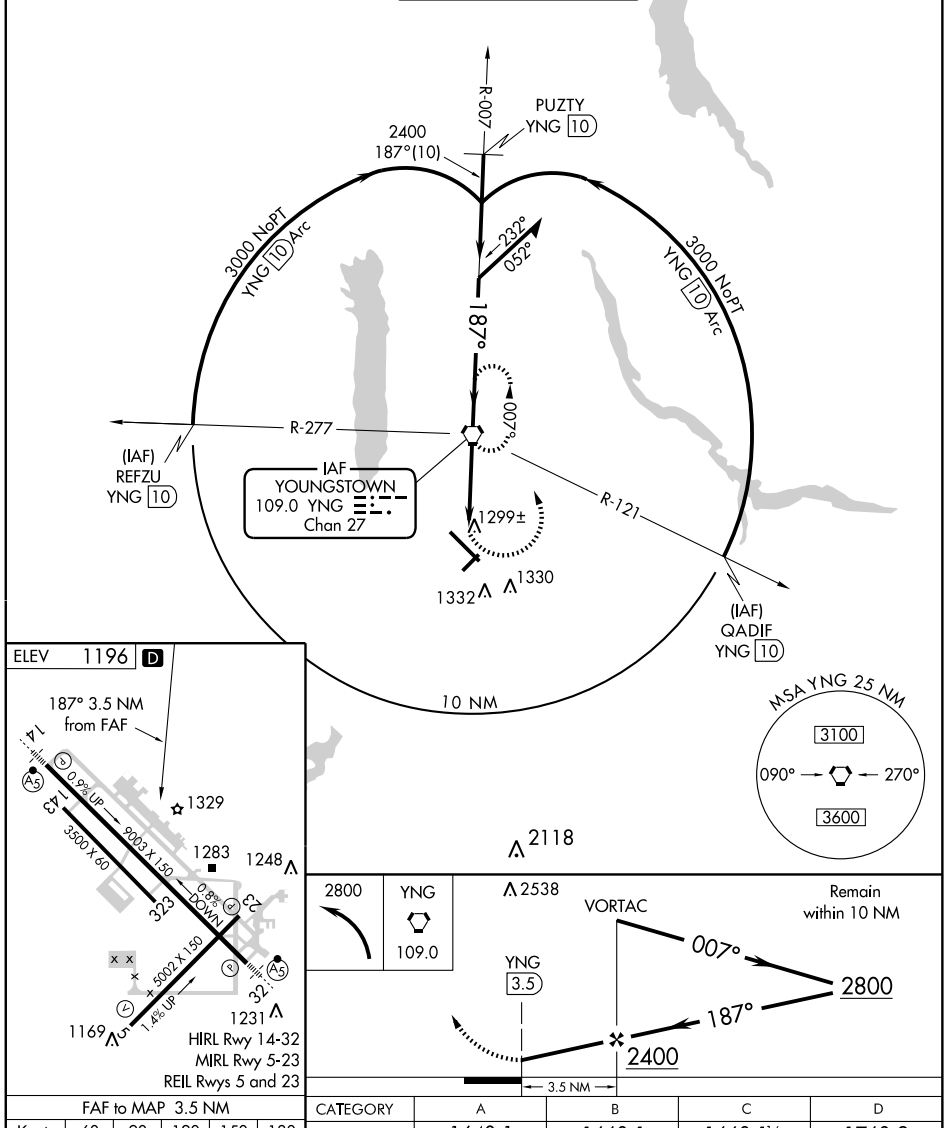
VORTAC YNG 109.0 Chan 27	APP CRS 187°	Rwy ldg N/A TDZE N/A Apt Elev 1196

VOR-A
YOUNGSTOWN-WARREN RGNL (YNG)

ASR

MISSED APPROACH: Climbing left turn to 2800 direct YNG VORTAC and hold.

ATIS	YOUNGSTOWN APP CON ★	YOUNGSTOWN TOWER	GND CON	CLNC DEL
123.75	133.95 322.3	119.5 263.0	121.9 275.8	118.25



FAF to MAP 3.5 NM					
Knots	60	90	120	150	180
Min:Sec	3:30	2:20	1:45	1:24	1:10

CATEGORY	A	B	C	D
CIRCLING	1640-1 444 (500-1)	1660-1 464 (500-1)	1660-1½ 464 (500-1½)	1760-2 564 (600-2)

EC-2, 14 JAN 2010 to 11 FEB 2010

LOC/DME I-TNF	APP CRS	Rwy ldg	5000
109.95	220°	TDZE	892
Chan 36(Y)		Apt Elev	900

ILS or LOC/DME RWY 22

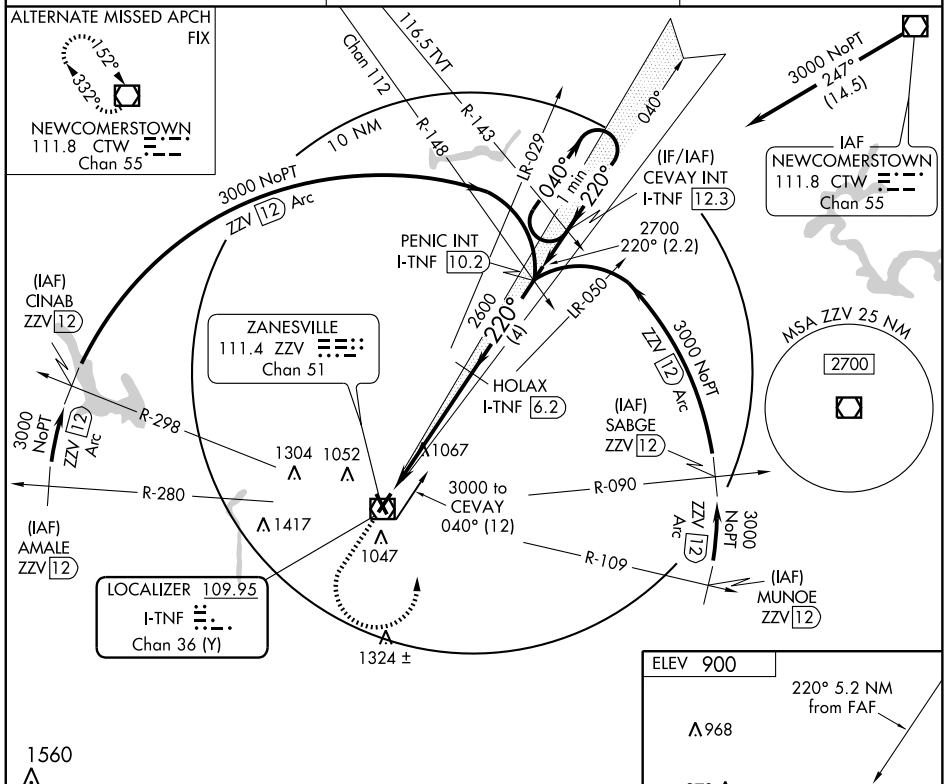
ZANESVILLE MUNI (ZZV)

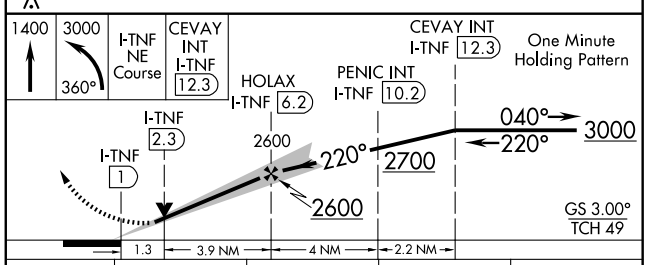
When local altimeter setting not received, use Newark altimeter setting and increase all DA 64 feet and all MDA 80 feet. Increase S-ILS 22 all Cats, and S-LOC 22 Cat C visibility ¼ mile. VDP NA when using Newark altimeter setting.

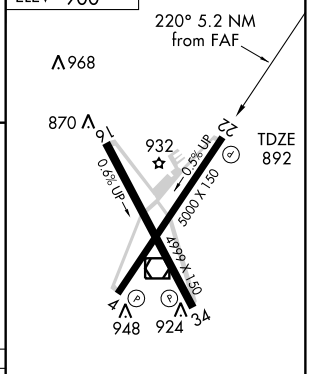
NA

MISSED APPROACH: Climb to 1400 then climbing left turn to 3000 via heading 360° and I-TNF NE course to CEVAY INT/I-TNF 12.3 DME and hold.

ASOS	INDIANAPOLIS CENTER	UNICOM
111.4	124.45 370.9	123.0 (CTAF) L







CATEGORY	A	B	C	D
S-ILS 22	1092-¾ 200 (200-¾)			
S-LOC 22	1320-1 428 (500-1)		1320-1¼ 428 (500-1¼)	1320-1½ 428 (500-1½)
CIRCLING	1360-1 460 (500-1)		1360-1½ 460 (500-1½)	1460-2 560 (600-2)

HIRL Rwy 4-22 L
MIRL Rwy 16-34 L
REIL Rwys 4, 22, 16 and 34 L

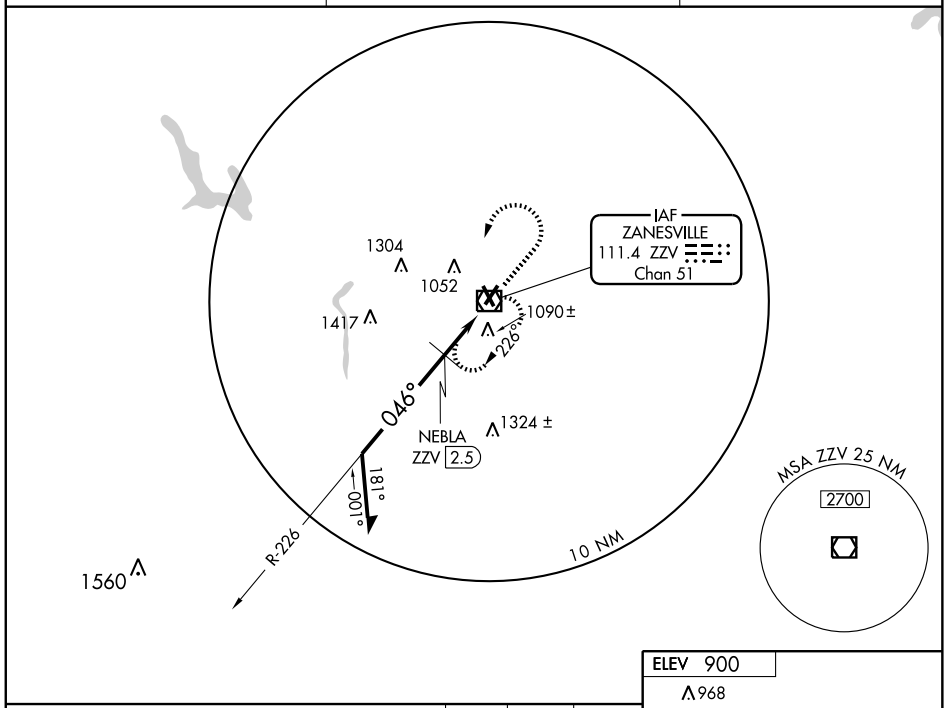
EC-2, 14 JAN 2010 to 11 FEB 2010

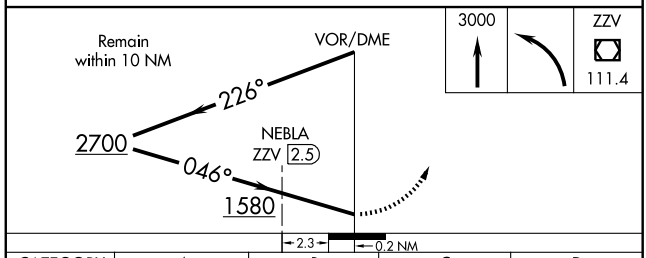
VOR/DME ZZV 111.4 Chan 51	APP CRS 046°	Rwy ldg 5000 TDZE 900 Apt Elev 900

VOR or GPS RWY 4
ZANESVILLE MUNI (ZZV)

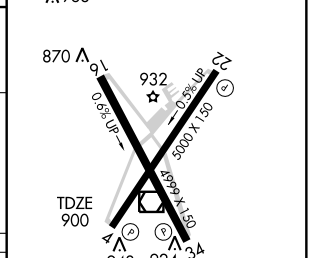
MISSED APPROACH: Climb to 3000 then left turn direct ZZV VOR/DME and hold.

ASOS	INDIANAPOLIS CENTER	UNICOM
111.4	124.45 370.9	123.0 (CTAF) L





CATEGORY	A	B	C	D
S-4	1580-1	680 (700-1)	1580-2 680 (700-2)	1580-2¼ 680 (700-2¼)
CIRCLING	1580-1	680 (700-1)	1580-2 680 (700-2)	1580-2¼ 680 (700-2¼)
NEBLA FIX MINIMUMS				
S-4	1340-1	440 (500-1)	1340-1¼ 440 (500-1¼)	1340-1½ 440 (500-1½)
CIRCLING	1400-1	500 (500-1)	1400-1½ 500 (500-1½)	1460-2 560 (600-2)



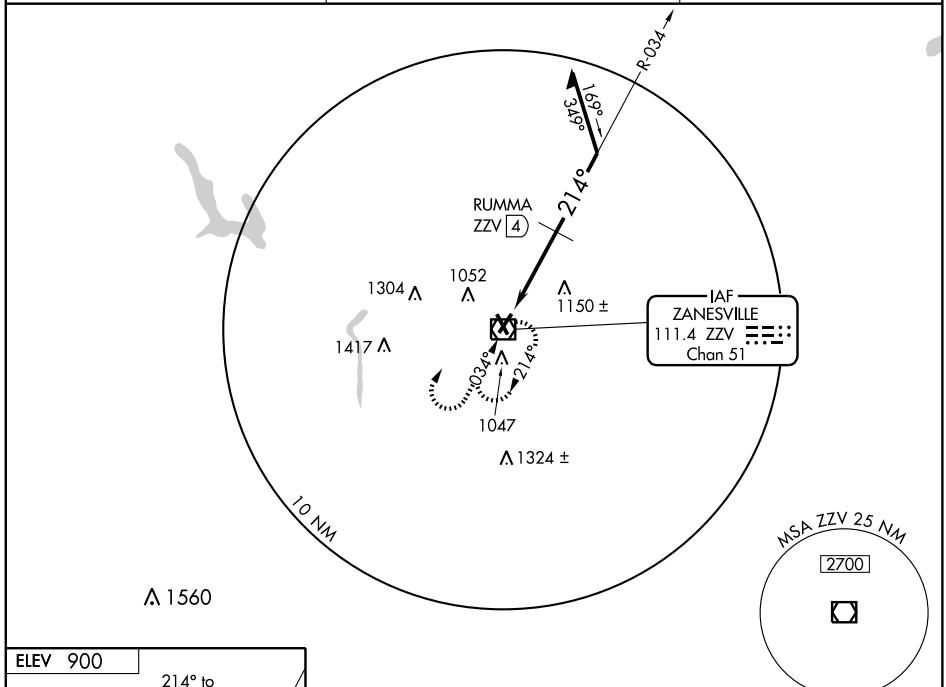
HIRL Rwy 4-22 L
MIRL Rwy 16-34 L
REIL Rwys 4, 22, 16 and 34 L

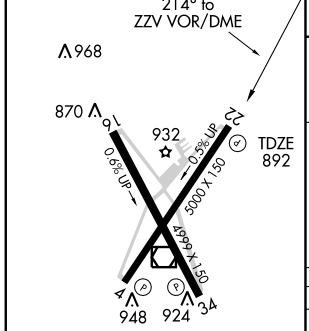
VOR/DME ZZV 111.4 Chan 51	APP CRS 214°	Rwy ldg 5000 TDZE 892 Apt Elev 900

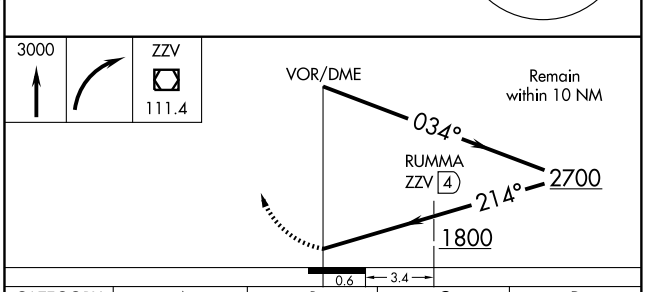
VOR or GPS RWY 22
ZANESVILLE MUNI (ZZV)

MISSED APPROACH: Climb to 3000 then right turn direct ZZV VOR/DME and hold.

ASOS	INDIANAPOLIS CENTER	UNICOM
111.4	124.45 370.9	123.0 (CTAF) L







CATEGORY	A	B	C	D
S-22	1800-1¼	908 (900-1¼)	1800-2¾ 908 (900-2¾)	1800-3 908 (900-3)
CIRCLING	1800-1¼	900 (900-1¼)	1800-2¾ 900 (900-2¾)	1800-3 900 (900-3)
RUMMA FIX MINIMUMS				
S-22	1400-1	508 (500-1)	1400-1½	508 (500-1½)
CIRCLING	1400-1	500 (500-1)	1400-1½ 500 (500-1½)	1460-2 560 (600-2)

HIRL Rwy 4-22 L
MIRL Rwy 16-34 L
REIL Rwys 4, 22, 16 and 34 L

EC-2, 14 JAN 2010 to 11 FEB 2010